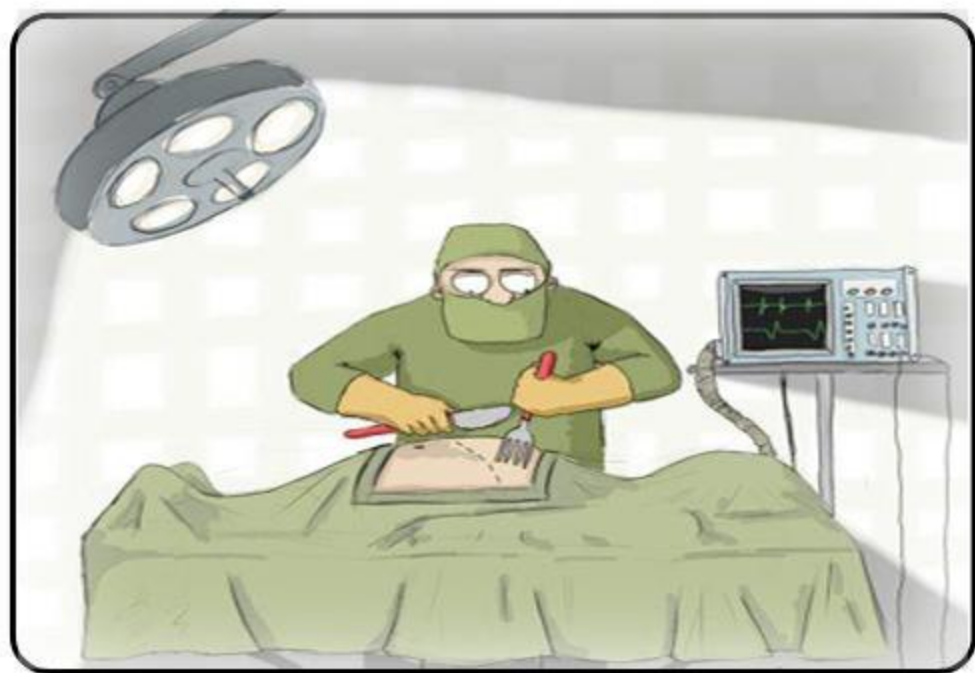


CLINICAL SURGERY



NOTES OF MEDADTEAM

Content:

Details of clinical surgery
from lectures of dr. Ali Hasseb

2010

WWW.MEDADTEAM.ORG



NMT10

VISIT...

LANZAROTE
Caliente.COM

HISTORY AND EXAMINATION I

PERSONAL HISTORY

Must be well memorized

- Name
- Age
- Sex
- Occupation
- Marital status
- Residence
- Special Habits
- ♀ menstrual and lactational history

تخفظهم زي ما بنسأل بيهم: اسم حضرتك ايه ؟ كم سنة ؟ ساكن فين ؟

متجوز ولا لا؟ بقالك كم سنة متزوج؟ في أولاد؟ كم ولد وكم بنت؟

حضرتك بتشتغل ايه؟

بتدخن أو بتشرب أى حاجة؟

- In personal history : if the patients children are older than 12 years → we call them offspring not children
- You can mention residence and occupation in Arabic if you don't know it in English.

COMPLAINT

In patients own words e.g.:

- Axilla = arm pit.
- Inguinal region = groin
- Ulcer = sore
- Rt hypochondrium = Rt upper quadrant of the abdomen
- Sometimes you have to 'make up' the complaint

E.g.: patient complains of weight loss, you know she is a case of thyroid, write her complaint: neck swelling NOT weight loss. If you write weight loss, then you have to analyze the etiology of weight loss.

PAST HISTORY

- Medical diseases
- Previous operations
- Admission to the hospital
- DM and HTN

جالك مرض مزمن قبل كده
عملت عمليات قبل كده
دخلت مستشفى قبل كده
عندك ضغط أو سكر

FAMILY HISTORY

- Similar conditions in the family (except traumatic cases)

في حد في عائلتك عنده نفس المرض؟

- DM and HTN

حد فيهم عنده الضغط أو السكر؟

NB | In any sheet, personal history, complaint, past history, family history as the previous scheme, the only difference is in present history.

PRESENT HISTORY

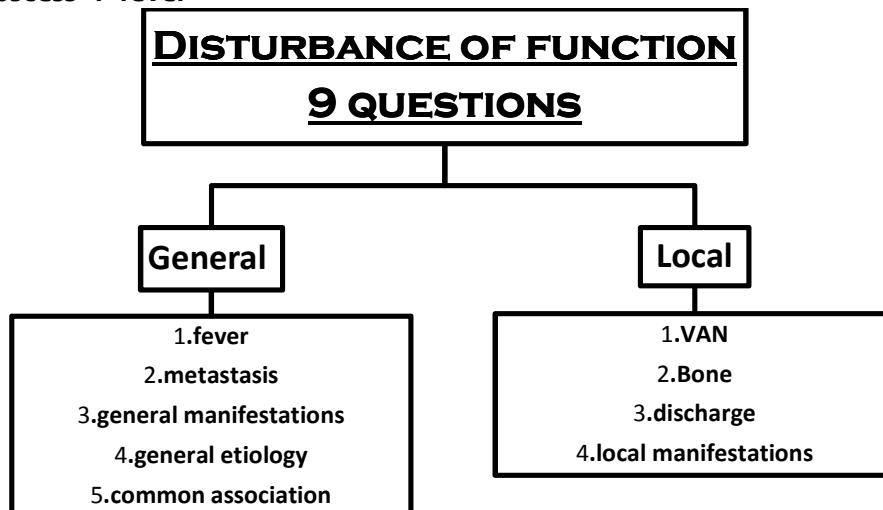
In any surgery sheet, you should ask about:

- a. Analysis of complaint (OCD)
- b. Swelling
- c. Pain
- d. Disturbance of function
- e. Trauma
- f. Investigations and ttt

Swelling, pain, trauma, investigation & TTT are constant in all sheets, so the only difference is in disturbance of function.

DISTURBANCE OF FUNCTION

The relation between the disease and the disturbed function (symptom)
E.g. abscess → fever



NB | The main 5 items (swelling, pain, and trauma, disturbance of function, investigations and TTT) are a must in all surgery sheets. But each of the 9 items in 'disturbance of function' is asked only if related to the sheet. In the following sheets, comments will be on related items only. Non mentioned items in each sheet are non-required

I. GENERAL:**1. Fever: to detect inflammation**

E.g. • breast → may indicate acute mastitis

• Lymph node → may indicate acute lymphadenitis

But, it's not asked in Nerve injury → no fever and no inflammation

2. metastasis

Very vague symptoms, so do not ask, write them as (no symptoms suggestive of)

3. general manifestations: that may be caused by the disease

E.g. • thyroid sheet:

May cause toxic manifestations

May cause hypothyroidism manifestations

E.g. • inguinoscrotal sheet:

Testicular tumor may produce estrogen causing feminization

Hernia may strangulate or obstruct causing general symptoms

4. general etiology: you ask about a general disease that may have caused the condition

E.g. • lymph nodes → caused by TB/syphilis

• Breast → T.B.

• Liver & spleen → bilharziasis, hepatitis and malaria

• Ischemia → valvular heart disease that caused embolization

• Varicose veins → D.V.T., prolonged recumbency, pelvic mass

5. common association:

Several diseases may have a common etiology (but no one caused the other)

E.g. • Hernia and varicose veins → caused by general mesenchymal weakness

No one of them caused the other

So in sheet varicose u ask about hernia.

• Atherosclerotic ischemia and cerebral ischemia

II. LOCAL:

E.g. swelling in the neck, what are the effects on the neck?

1. VAN: Vein, Artery, Nerve

E.g. • Swelling on a limb: effect on

♦ vein → oedema

♦ Artery → ischemia

♦ Nerve → numbness & paresis

• Swelling at parotid: effect on nerve only

• Swelling in breast: effect on vein and lymph only (causing lymphoedema of upper limb)

2. Bone: swellings attached to bones or joints

• Only in parotid → affects tempro-mandibular joint

3. Discharge:

• Breast and ulcer

• Others: scrotum and LNS

4. local manifestations:

• Ischemia sheet,

• varicose veins sheet,

• nerve sheet

SOME IMPORTANT POINTS IN HISTORY TAKING

- الآراء الشخصية للأساتذة مطلوبة في الرواند "ممكن تجمعها في كراسه "
- ملحوظات عن كتابه الـ **sheet**

IN ONE STORY, TAKE ALL THEN WRITE ALL

- تكتب الـ **personal** مع العيان وبعد كده تسيب القلم
- خذ **complaint** متصدقش العيان قوى و لقيت جزء هيصعب الشيت ظبطه
- لو العيان حاول يتوهك متسمعش كلامه و لو الوقت راح منك أَلْف الباقي بنظام الـ **system's sheet**
- اساله كله ثم رتب أفكارك
- أى حاجه (+ve) خذها OCD
- من امتى ؟ ازاي ؟ مرة واحده ولا سنه سنه؟ بتزيد ولا بتقل؟
- رتب (+ve) بترتيب الحدوث '**chronologically**'
- بقيه الـ (-ve) sheet بترتيب A.H system's sheet إلى انت حافظه
- اكتب بخط كبير، وسع المسافات وسيب سطر.. ادخل به ٥ ورقات بدل ٤
- ما تجيبش سيرة العناوين... قول الأسنله إلى تحت العنوان
- E.g bone → say : affection of joint movement
- العنوان إلى مش مهم في sheet معين كأنه مش موجود

HOW TO ASK AND COMMENT

Sometimes you have to ask in a way, and comment in another way

Table	HOW TO ASK AND COMMENT
Tuberculosis	
Write	NO History suggestive Of T.B toxemia in the form of loss of appetite, night sweating or night fever لكن مش هسأل يتسخن بالليل، بتعرق بليل، وزنك بيقل، مالکش نفس تاكل عشان ممكن الإجابة تكون اه
Ask	جالك الدرن قبل كده؟
Metastasis	
Ask	Never asked
Write	No history suggestive of metastasis in the form of bony aches, RT hypochondrial pain, headache, vomiting, blurring of vision, cough...etc (لان مفيش عيان metastatic هينزلك الامتحان. ممكن carcinoma لكن مش metastasis) (لانها كمان أسئلته مش واضحة أو مختصة بالـ metastasis فقط، لكن هكتب ١٢ سطر)
Leukemia	
Ask	Bony aches (vague question) Bleeding gums (for bleeding tendency)? بتصحى من النوم بقك مليون دم
VAN	
Ask	V: ايدك بتورم A: ايدك بتوجعك N: ايدك بتتمل } Vague Q.
Write	There is/there is no history suggestive of distal limb edema, parasthesia or deformity

GENERAL EXAMINATION

I. THE PATIENT is lying comfortably in bed, of average body built, average mentality & co-operative.

NB | Mentality NOT Intelligence
Built NOT Weight

II. VITAL SIGNS:

1. Pulse: count in 15 seconds, multiply * 4.

If the examiner asks you say you counted in a complete minute. The number has to be EVEN.

2. Temperature: thermometer, orally.

3. Blood Pressure: لازم تبقي حريف ضغط

4. Respiratory Rate

III. EXAMINE ALL THE BODY OF THE PATIENT:

- In related item ,comment whether +ve or -ve
- Non related item ,do not comment if -ve
BUT you MUST comment if +ve

Examples:

- a chronic heavy smoker with a wheezy chest:
You can use it to comment on Fitness for surgery
► Say: wheezy chest must be treated before surgery
- Scar of appendicectomy:
I can use it to prove I've done proper general examination
► Say: the patient has a scar at ...; the scar is ... cm, healed by 1ry/2ry intention.
If abdominal: It shows/doesn't show impulse on cough.
- During general examination, تلفظ اللى الانسان الطبيعى يعرف يلقطة
Patient with main complaint lipoma LL, also, has a simple ganglion UL, VV and varicocele. Simple ganglion can be detected during blood pressure measurement & varicose veins can be detected during local examination lower limb, but don't examine for varicocele.

LOCAL EXAMINATION

RULES

Use your eyes 1st
Then use your hands
Tongue never at all

e.g

لو قالك افحص الغده ما تتكلمش خالص لغايه ما تخلص الفحص
ما تتخضش ... كل **local** وليه عليمه

▪ Percussion:

خبط خبطتين ٣ لا

لو ما سمعتش غير مكانك ولو سنه صغيره،

وما تكررش وما توطيش عشان تسمع عشان تبقي محترم

PERCUSSION اصلا

احساس مش سمع

▪ Auscultation: في النظرى

▪ Transillumination:

Point the torch at the patient's finger, then on the cyst.

If the cyst seems like the patient's finger, then it's not translucent

3 conditions for translucency:

Cystic

Thin wall

Clear fluid

DIAGNOSIS

Table DIAGNOSIS

Most important 2 questions حالتك ايه؟
ليه قلت كده؟

4 Components

Anatomical

To detect system affected

E.g.: Pain in Lt Quadrant abdomen: Lt Kidney or spleen

Pain in L.L: Joints or ischemia or varicose veins

Pathology

E.g. splenomegaly, pulmonary hypertension

Etiological

To detect what caused the problem

Functional

To detect Complications

Fitness for surgery:

1. long case

2. tt can be surgical

I.e. lymphoma is not surgically treated, so don't mention
fitness for surgery

Table	FITNESS FOR SURGERY
First question	حالتك ايه؟ In order: 1. Etiological: e.g. secondary 2. Pathological: e.g. toxic 3. Anatomical: e.g. goiter 4. Functional: e.g. not complicated
Second question	ليه قلت كده؟ الدفاع عن التشخيص لازم بالترتيب ده In order: 1. Anatomical: e.g. goiter as it's a swelling in the lower part of the neck 2. Pathological: e.g. toxic because (manifestations...) 3. Etiological: e.g. 2ry because... 4. Functional.

SWELLING SHEET II

I. PERSONAL HISTORY

II. COMPLAINT:

RULE

If Complaint: Swelling – Pain – Ulcer, Mention site exactly
E.g. swelling in the back of the upper part of the arm

III. PRESENT HISTORY:

Table	PRESENT HISTORY IN SWELLING SHEET
Swelling 'OCD'	امتى ابتدا؟ ابتدا مرة واحدة ولا سنة سنة؟ بيزيد ولا يقل؟
Pain	فيه وجع؟
Disturbance of Function	
I. General :	
§ Constitutional manifestations	سخنت؟
We stress on fever if : it's related to onset of disease / if it is recurrent	من غير ما تسأل مافيش
§ symptoms of metastasis	جالك درن قبل كده؟
§ General etiology; ONLY T.B. (can produce swelling in any part of the body)	
II. local:	
§ VAN: if related (according to site of swelling)	رجلك ورمت؟
§ Bone: in swellings related to JOINTS (affection of movement)	فى افرازات؟
§ Discharge: TB sinus & chronic abscess	
Trauma 'Hematoma' Very imp	اتخبطت فيها قبل كدة
Investigations and treatment	اشعة / تحاليل؟

IV. PAST HISTORY

V. FAMILY HISTORY

VI. GENERAL EXAMINATION: see before

VII. LOCAL EXAMINATION:

NB | If patient has 2 swellings, comment on the bigger, and say the other one has the same characters but smaller in size.

1. Inspection: 8S

Site: exactly

Size: cm

Shape: rounded/oval or irregular

Surface: smooth/nodular or irregular

Skin: Scar/ulcer/dilated veins/redness

Special character: pulsations (you have to look TANGENTIALLY)

Surrounding structures:

- **Superficial or deep to muscle: ask the patient to contract his muscle**
 - i. Superficial to muscle = + + + swelling
 - ii. Deep to muscle = — swelling
 - iii. Intra-muscular = no change in swelling
- **Effect on nearby VAN**
 - i. Vein compression = edema
 - ii. Artery compression = ischemia

Other Swellings: draining LNS

- **If the swelling is a lymph node, check the catchment area**
- **E.g. swelling is axillary LNS: check hands**

2. Palpation: TT 4S CE 3S

Tenderness (look at the patient's face)

Temperature: using dorsum of your hand (as its usually DRY, NOT more sensitive)
imp oral question

Site

Size

Shape

Surface

Consistency:

a. Cystic:

- 1) **Fluctuation (Fig. 1):** using both your hands; one is pressing on the swelling at one side, while the other is observing the fluctuation on the opposite side. It is done in 2 $\perp$ directions as muscles are fluctuant in the transverse direction.

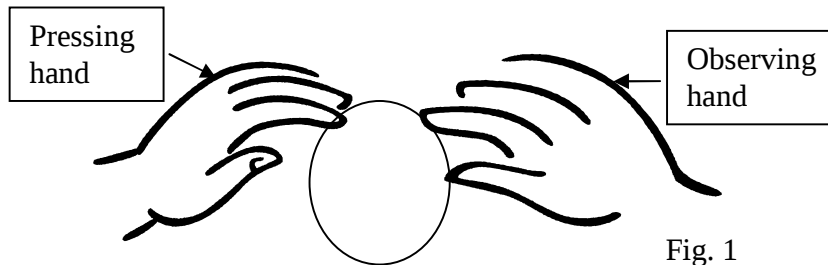


Fig. 1

- 2) **Paget test (Fig. 2):** if swelling is < 2 cm, very tender, very deep
 Fix swelling with one hand; press with the other hand using one finger
 ♦ Centre of swelling: more yielding
 ♦ Periphery of swelling: less yielding



Fig. 2

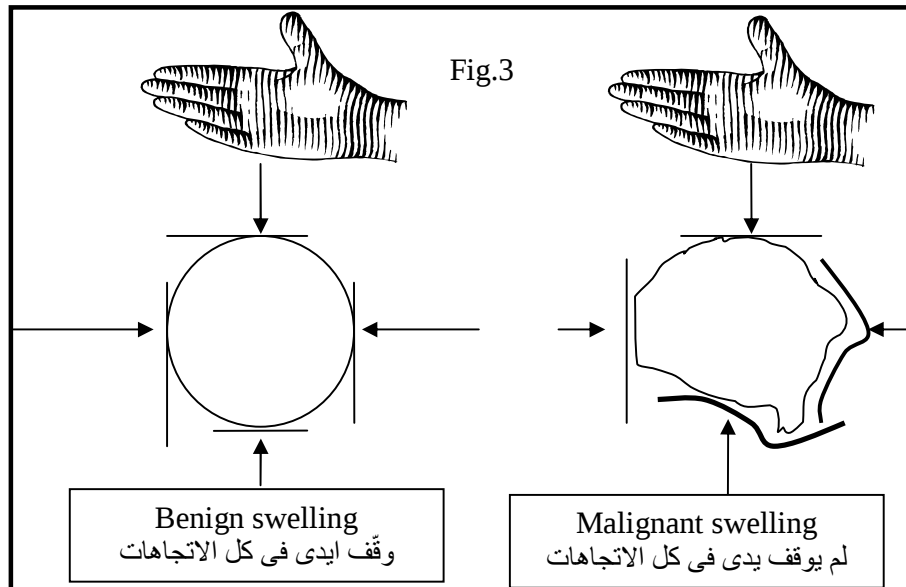
b. Solid: Soft or Firm or Hard

- NB** Swellings are either:
- soft exactly as ear lobule,
 - Hard exactly as bone or
 - Firm as any degree between soft and hard.
- i.e. soft and hard are very narrow scopes, while firm is a very broad one.

Edge (Fig.3): move your hand towards the swelling in all directions

Swelling: وقفنى : well defined (benign)

Swelling لم يوقفنى : ill defined (malignant or inflammatory lesions)



Oral Question

This test of moving your hands towards the swelling is not applicable in breast – neck – intra abdominal swellings.

Special character: vv imp

- Compressibility
- Reducibility

Table SPECIAL CHARACTER IN A SWELLING

Compressibility	Reducibility
Swelling disappears partly or completely on pressing the WHOLE swelling (any direction)	Swelling disappears partly or completely on pressing the swelling in a CERTAIN DIRECTION
Returns to its normal size on RELEASING PRESSURE	Returns to its normal size only on STRAINING

- **Expansile impulse on cough**

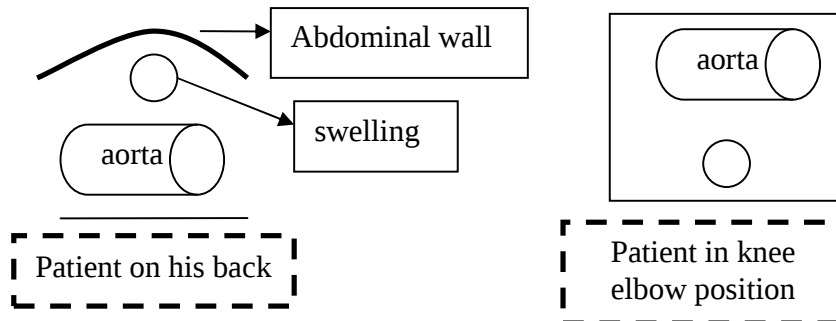
- **Pulsations:**

Expansile or transmitted?

2 methods for differentiations:

1. put two fingers slightly apart over the swelling and observe the distance
 - a) your fingers apart from each other slightly = expansile
 - b) your fingers remain at the same distance from each other = transmitted

2. put the swelling away from the artery
e.g. in a swelling related to aorta

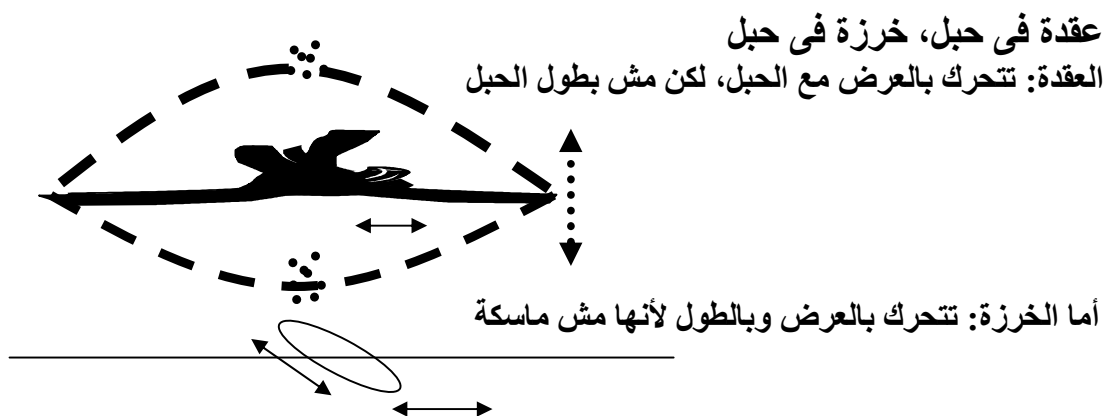
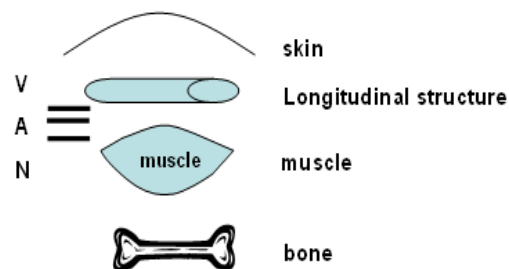


- **Thrill: AV fistula (machinery)/aneurysm (systolic)**

Surrounding structures:

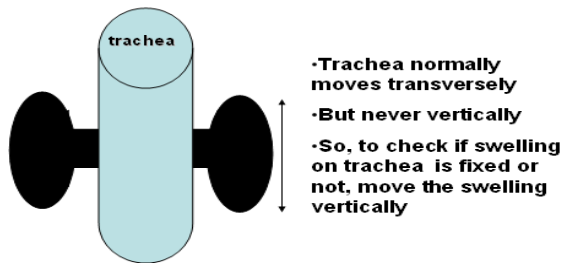
- **Skin: fixed or not? By pinching or Sliding**

- **Longitudinal structures:**



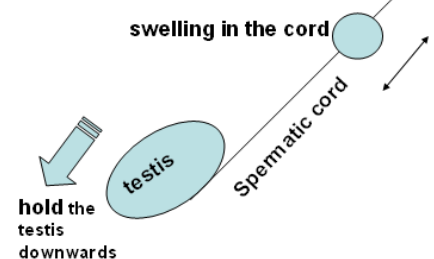
Examples:

► Trachea:

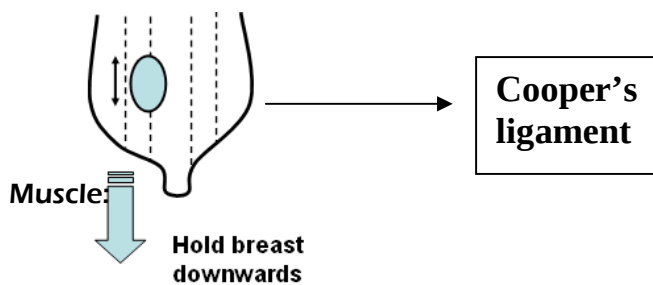


•Trachea normally moves transversely
•But never vertically
•So, to check if swelling on trachea is fixed or not, move the swelling vertically

► Spermatic cord: you have to move the swelling longitudinally to make sure it's not attached to the spermatic cord, but you have to hold the testis downwards to avoid its movement when you are trying to move the swelling.



► Cooper's ligaments: check mobility of the swelling longitudinally, but you have to hold the anterior part of the breast downwards.



► ► ► ليك ولحياتك

1. Swelling not fixed to muscle:

- muscle relaxed: moves بالطول والعرض
- muscle contracted: moves بالعرض والطول

2. Swelling fixed to muscle:

- muscle relaxed: moves بالعرض
- muscle contracted: doesn't move neither vertically nor transversely

عقدة في حبل

VAN:

- V – distal edema
- A – distal pulsations
- N – distal sensations

Bone: if the swelling is fixed to bone, it loses mobility in all directions.

Table	EXAMPLES	
	Fixed	Infiltrating (affects function of VAN i.e. ischemia, lost nerve function)
Benign neoplasms	x	X يزق بس
Chronic inflammation	√ fibrosis	X (never affects function VAN)
Malignant swelling	√	√ (mass in hand affecting ulnar nerve)

NB | Site, size shape, surface description by palpation can be different from that by inspection. Write what u inspected as it is and what u palpated as it is.

NB | By inspection: if no effect on surrounding structures can be seen (e.g. breast/hernia) don't mention surrounding structures in inspection
I.e. breast only has [6S] instead of [8S] (as there're no special characters in breast swellings)

Other Swellings

3. Percussion, auscultation : as general

VIII. DIAGNOSIS:

Etiological	Pathological	Anatomical	Functional
	Congenital/traumatic/inflammatory /neoplastic		Complications & fitness for surgery

NB | Onset and course are very imp for pathological diagnosis.
I.e. Q: why it's not malignant?
Answer: a 5 year course, then say not fixed, not infiltrating...Etc...

LIPOMA AS EXAMPLE OF SWELLING

In examination you have to check for pulse because you are afraid of sarcoma destroying artery and nerve

EXAMPLE on how you should write the diagnosis:

Subcutaneous lipoma in the medial aspect of right thigh associated with bilateral varicose veins and simple ganglion on the dorsum of left wrist, patient is clinically fit for surgery apart from his wheezy chest which must be treated pre-operatively

Oral | Why did you diagnose this swelling as lipoma?

1-Subcutaneous as it is more prominent on contraction (anatomical)

2-This swelling is **not traumatic** swelling (e.g. hematoma) as there is no history of trauma.

This swelling is **not inflammatory** because by general examination there is no fever or other constitutional symptoms and by local examination there is neither hotness nor tenderness over the swelling.

This swelling is **not malignant** because of the slowly progressive **course**, it's **not fixed, not hard**, no affection of **LNS**, with well defined edges and there's no affection of **VAN** → therefore its benign neoplasm

(Pathological)

So, it is a benign neoplasm.

It's Lipoma as:

a) is soft in consistency ,

b) lobulated,

c) Fixed to the skin and having a slippery edge

PAROTID SHEET III

Table PAROTID SHEET

I. PERSONAL HISTORY

As usual

II. COMPLAINT:

Swelling in the Lt/Rt side of the face

III. PRESENT HISTORY:

1- Swelling : it's relation to sour food

عندك كلكوعة ؟

2- Pain: it's relation to sour food

بيبزبد عندك لما تاكل ليمون أو خل؟

3- Disturbance of function:

• General :

- Constitutional symptoms
- Symptoms of metastasis
- General etiology e.g. TB , parasites, DM, drugs , liver cirrhosis, alcoholism
- Common associated : dry eye (important in case of autoimmune diseases: Mikuliez and Sjogren)

سخنت ؟

مبسنالاش عليها لان اكيد معدوش
جالك درن ، سكر ، تليف في الكبد ، بتشرب كحل او بتاخذ ادوية
معينة؟

• Local:

- VAN = NERVE ONLY → facial nerve palsy
- Bone : tempromandibular joint
- Discharge: usually there is no discharge

بوفك اتعوج ؟! عينك ما بتقفلش كويس؟!

فيه مشكلة في حركة الفك عندك؟!

هل في افرازات؟

4- Trauma : possible hematoma

اتخبط فيها؟

5- Investigations and treatment

عملت اشاعات او تحاليل ؟

خدت علاج للحالة؟

IV. PAST HISTORY

V. FAMILY HISTORY

VI. GENERAL EXAMINATION: AS USUAL

VII. LOCAL EXAMINATION:

1. Inspection : 8S +

Special characters:

- Pulsations: possible aneurysm
- Raising the ear lobule: very important

Surrounding structures:

- Masseter: superficial to it
- Facial nerve: affected or not

Other Swellings: submandibular and upper deep cervical LNs

Oral cavity:

- Opening of parotid duct opposite to 2nd upper molar in case of discharge (press on the gland → discharge will be expressed)
- Enlarged deep lobe: will appear as a mass in the oropharynx behind tonsils

2. Palpation: TT 4s CE 3S

NB | Don't forget to check for compressibility as 50% of parotid swellings in children are hemangiomas.

VIII. DIAGNOSIS EXAMPLE

Bilateral diffuse (i.e. non neoplastic) parotid swellings, may be post alcoholic (from personal history or endemic parotitis (because of history of bilharziasis) and it may be sialectasis

Oral → Why did you diagnose this as a parotid?

- Because the swelling is at anatomical site of parotid
- It's superficial to masseter
- raising the ear lobule
- Swelling and pain increase with sour food

→ Why did you exclude the possibility of neoplasm?

- because it's bilateral and diffuse swelling so most probably it's not a neoplasm but investigations are still needed to confirm the diagnosis

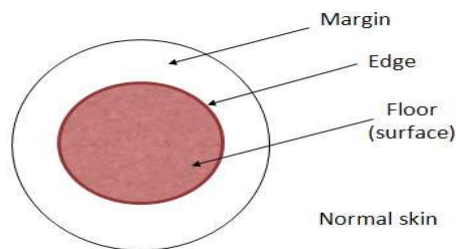
→ Is it important to check for fitness for surgery in case of parotid?

- In most cases fitness for surgery is not considered in parotid sheet as its ttt isn't surgical (dangerous surgery)

ULCER IV

A Simple Introduction to Any Ulcer

Margin: area between edge and intact skin, most important in diagnosis of an ulcer
 يكون فيها المرض قبل الجلد ما يقع



Types of edges

Punched out: Sudden loss of tissues



Sloping: healing ulcer

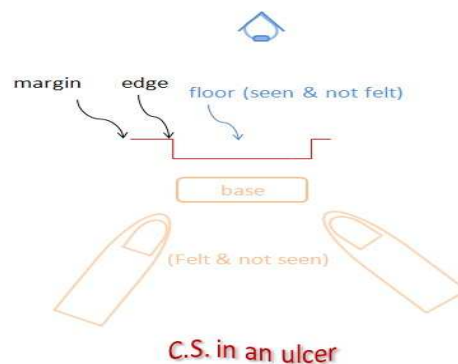


Undermined: as loss of SC tissues > skin

Or

loss of submucosa > mucosa

lymphatics which are present in SCT and submucosa abundantly)



C.S. in an ulcer

Raised and everted: due to rapid growth of tissues e.g. malignancy



زى ما زجر!

Rolled in: due to trials of healing



General characters of non-specific ulcer

Floor = granulation tissue

Edge = punched out (non healing)

or

sloping (healing)



Edge and base on palpation

Early => soft

Late => Indurated (callous or indolent) = fibrosis obliterating blood supply thus it's healing resistant and ttt is excision

Table CAUSES OF CHRONIC LEG ULCERS

1. Traumatic
2. VAN (V= varicose / A= arterial / N= trophic)
3. Chronic inflammatory:
 - Nonspecific
 - Specific: TB / syphilis
4. Neoplastic: squamous cell carcinoma
5. Miscellaneous: hemolytic anemia e.g. sickle cell anemia

Ulcer Sheet

Table	ULCER SHEET
I. PERSONAL HISTORY	As usual
II. COMPLAINT: raw area or sore	If Complaint: Swelling – Pain – Ulcer Mention site exactly
III. PRESENT HISTORY:	
Swelling: OCD	امتى ابتدا؟ ابتدا مرة واحدة ولا سنة سنة؟ ببزيدي ولا ببقل؟
Pain	فيه وجع؟
Disturbance of function	سخت؟
I. General Manifestations:	
a) constitutional manifestations	
b) symptoms of metastasis	من غير ما تسأل مافيش
c) general etiology:	جالك درن قبل كده؟
T.B.	عندك تكسير في الدم أو أخذت نقل دم كثير؟
Syphilis	
Haemolytic anemia	
Comment:	
(no history suggestive of hemolytic anemia in the form hemolytic crisis or repeated blood transfusion)	
II. Local Manifestations	
- VAN	عندك دوالي في رجلك؟ عندك وجع في رجلك مع المشى أو لما ترفعها؟ بتحس في رجلك ده زي التانية؟
- Bone: attachment to bone is examined, not asked in history	مبنسالش عليها بنفحصها فقط
- Discharge:	في افرازات؟
Trauma	اتخبطت في المكان ده؟
Investigations and ttt.	اشعة / تحاليل؟
IV. PAST HISTORY	
V. FAMILY HISTORY	

VI. LOCAL EXAMINATION:**1. Inspection: 4S MED 2S****Site:** exactly**Size:** cm**Shape:** rounded/oval or irregular (mention axis if oval)**Surface:** = floor**Margin:** malignant nodules/dilated veins/redness & inflammation/T.B.**Edge:** type**Discharge:** in the dressing**Surrounding structures:**

- ▶ Effect on nearby VAN
 - i.Vein: look for Varicose veins
 - ii.Artery: look for trophic changes
 - iii.Nerve: check loss of sensation

Other Swellings: draining LNS**2. Palpation: TEB 2S [gloves]****Tenderness** (look at the patient's face): palpate edge NOT floor (severe pain)**Edge:** soft/indurated**Base:** mass of tissue beneath and around the ulcer**Other Swellings****Surrounding structure**

- ▶ mobility: fixed or not to bone
- ▶ skin: for oral discussion only, can be detected by passing a probe between the edge and skin
- ▶ VAN: edema, pulse & sensation

Table GLOVES DURING EXAMINATION

- ulcer
- gangrenous area (aseptic → septic because of my hand)
- oral cavity
- PR

NB | If a patient has an ulcer and varicose veins, or an ulcer and ischemia, take the case as ischemia or VV. Not ulcer. You can take sheet ulcer in patients complaining of neuropathic ulcers, traumatic ulcer or malignant ulcer.

VARICOSE VEINS V

A Simple Introduction for Varicose Veins

In 1ry VV there is usually weakness of long saphenous vein causing its dilatation & tortuosity.

But there may be also incompetent perforators causing blowouts opposite to the perforator valve

► What is saphenous varix?
Cystic swelling at the sapheno femoral junction

► What is its indication?
It indicates that there is incompetent sphenofemoral junction

There is impulse on cough and thrill
So, once sphena varix there is thrill and impulse of cough
But if no sphena varix there may be thrill and u should detect it yourself

► Predisposing factors of 1ry varicose veins:

- More with long standing
- Mesenchymal defect & hernia
- 50 % +ve family history

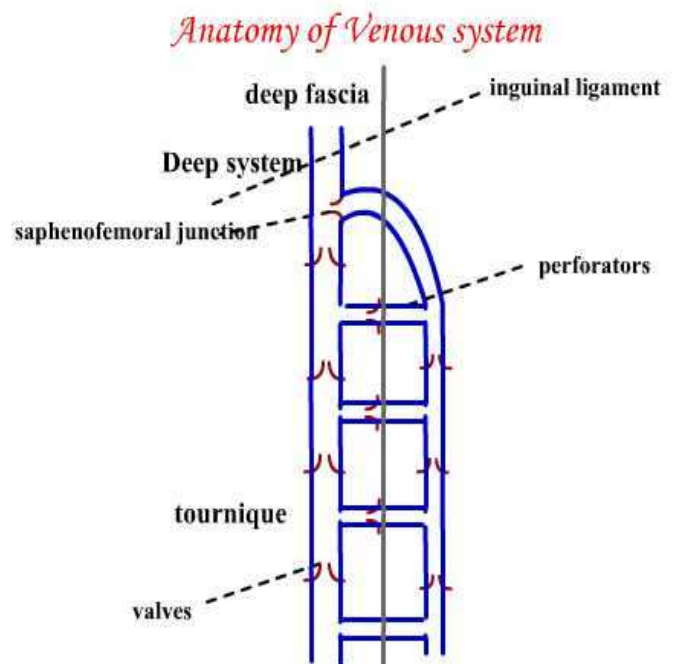
1ry vv is usually tubular & uniform & there may be saccular dilatation

2ry vv: is due to proplem in deep veins usually DVT so blood pass from deep to sup. System & usually these cases are irregular & cross the groin

Also A-V fistula may cause 2ry vv ►►► pulsatile vv

Swelling in femoral triangle may close the deep system

So, we should ask about history of DVT (operations , prolonged recumbency , contraceptive pills , hospital admissions , heparin) A-V fistula (trauma , swelling in femoral triangle
Complications are more common in 2ry vv



Varicose Veins Sheets

Hint | Many of vv pts consider that vv are swelling but this is not considered a swelling & we mention it is in history as prominent veins not swelling

Table CAUSES OF SWELLING WITH VARICOSE VEINS

- 1- sphenal varix
- 2- Hernia
- 3- Inguinal L.N.
- 4- Pulsating swelling in A-V fistula
- 5- Swelling in femoral triangle

Table VARICOSE VEINS SHEET

I. PERSONAL HISTORY	As usual
II. COMPLAINT:	bluish streaks under skin , pain , ulcer
III. PRESENT HISTORY:	عندك دوالي في رجلك و من امي ، في ناحيه واحده و لا الاتنين
Swelling: (sphenal varix) + ask about prominent v.	
Pain	الوجع في في فخذك و لا في السمانه و مش مهم اسئله ايه الي بيزود و يقلل الوجع عشان احنا عارفين طبيعه الوجع الي بييجي مع الدوالي، اكتبه على طول
Disturbance of function :	
1. General	
a) Fever NO (don't ask although DVT causes thrombo phlebitis that causes fever, but we ask about fever if it is caused by the vv not another disease)	مبسنالش عنها
b) Malignancy	
c) General Etiology: DVT, pelvic operations, typhoid	جالك جلطه في الوريد و اتجوزت في المستشفى و ادولك heparin
Comment: no history of DVT in the form of acute leg pain , swelling , fever , hospital admission & heparin	
d) Common association : hernia flat foot , piles , varicocele	عندك فتق اربي و عندك flat foot و بواسير ؟
2. Local:	
Local Manifestations: V.IMP edema, thrombophlebitis, Pigmentation , ulcer	رجلك بتورم ، لوها اتغير ، في نزيف ؟، في قرحه ، في خطوط حمرا بتسخنك و توجعك

Trauma

اتخبط في رجلك

Investigations and ttt

عملت أشعة؟ تحاليل؟ عمليات؟

IV. PAST HISTORY**V. FAMILY HISTORY****VI. DIAGNOSIS****Table EXAMPLE FOR HISTORY**

Pt named , 45 yers old , living in Embaba , married since 20 years and have 2 offsprings youngest is 14 years , working as a baker , no special habits of medical importance
 He is complaining from bluish streaks under the skin
 The condition started gradually, one year ago, it has a progressive course.
 There is pain which is dull aching affecting calf, increased by prolonged standing and relieved by elevation of foot
 The patient had Doppler done before with no available results
 There is no history suggestive of DVT as hospital admission, heparin infusion, prolonged recumbency, contraceptive pills
 No history of edema, ulcer, thrombophlebitis or hge
 No history of trauma
 No history of previous ttt
 No DM no HTN
 The patient is not diabetic or hypertensive
 No history of previous operations
 No family history of D.M. or Hypertension
 No similar conditions in the family

VII. LOCAL EXAMINATION

1. In any bilateral organ as in case of (ischemia, breast, vv, nerve) expose sides and examine normal 1st then use the normal side as control

Ex. Rt. Leg is cold in comparison to normal left leg.

2. Don't forget to examine back of leg in case of vv: as short saphenous vein runs on the back of leg.

Table LOCAL EXAMINATION

Inspection	Palpation
1.Varicose Veins	1.Varicose Veins
2.Extent and pattern	2.Fegan
3.Cough	3.Cough
4.Complications	4.Complications
5.Etiology	5.Etiology
6.DD	6.DD

1. Inspection**1. Varicose Veins**

- Look for dilated , enlarged tortuous sup. Veins in leg & thigh and look at back

2. Extent & pattern

- Affecting long or short saphenous
- Tubular , saccular or serpentine or coiled

3. Ask patient to cough & examine

- Sphenavarix if found so automatic there is impulse and thrill

4. Complications

Inspect for :

- Edema-Thrombophlebitis-Pigmentation& eczema
- Ulcer : if present comment as
4S MED 2S Look at ulcer

5. Etiology

- 1ry no etiology
- 2ry : DVT cant be seen
- But you may see swelling in femoral triangle
- You may see pulsating vv indicating A-V fistula

6. What causes pain LL?

- o ischemia (inspection & palpation) check pulse
- o VV (inspection)
ارفع رجلك لورا يحصل وجع -
- flat foot (inspection)

2. Palpation**1. Varicose Veins**

- Palpate for the veins as in fat patients it may not be seen but palpable
N.B, veins shouldn't be felt in thigh only till knee

2. Fegan test

- Palpate for a defect in fascia opposite to site of incompetent
حببت تعمله اعمله بس مش مهم

3. Ask patient to cough & palpate for thrill and impulse on cough

- (if there is sphenavarix so + ve impulse and thrill and no need to do it)

4. Complications

- Same as inspection
- And if ulcer comment by TB 2S

5. Etiology

- Detect pulsation or thrill for A-V fistula

6. Ischemia (inspection & palpation) check pulse

- Osteoarthritis (palpation only)
- Peripheral neuritis (palpate only)
- Sciatic (palpate only) : elevate his leg upwards and see if pain occurs or not

Table | EXAMPLES

Example for comment on inspection

1. By inspection there are elongated dilated tortuous superficial veins on medial aspect till mid thigh , not crossing the groin
2. Some are tubular, others are saccular & there are no veins crossing tibia
3. The patient has sphenavarix with expansile impulse on cough
4. There is no ulceration, pigmentation, eczema or thrombophlebitis
5. There are no ascesses in femoral triangle or pulsating varicosities
6. No flat foot no trophic changes or colour changes or gangrene of ischemia

Example for comment on palpation

1. By palpation there is no dilated tor.....
2. Fegan test showed multiple fascial defects above and below the knee
3. There is sphenavarix with thrill & palpable impulse on cough
4. No edema, no, no, no(same as inspection)
5. There are no masses in femoral triangle no pulsating VV, no thrill
6. No trophic changes of ischemia, no affected sensations (not P.N.),no joint click (not osteoarthritis)

3. Special test for Varicose Veins

A. For superficial valves

* Percussion test

* احط ايدي علي الوريد تحت و اخبط بالايدي التاتيه علي الوريد من فوق ، لو حسيت ان فيه دم بيجمع يبقى incompetent superficial valves

NB | The distance between your upper and lower hand should be more than 12 cm to avoid falling between 2 normal valves

B. For perforators

* Trendleberg test:

- Let the patient lie down
- Empty the veins
- Tie the tourniquet around saphenofemoral junction
- Let the pt. stand
- Inspect

If he has incompetent perforators -> sup. Veins fill rapidly & when you remove the tourniquet —> blood fills from above if there is incompetent saphenofemoral junction

If veins don't fill -> perforators are intact & don't do multiple tourniquet test

If superficial veins fill -> do multiple tourniquets test

* Multiple tourniquet test:

- Same steps of as trendlenbergtest but you tie also above and below knee
 - Inspect each segment
- The one which fills after u remove the tourniquet contain incompetent perforators

To locate site of incompetent perforator → very simple say it is opposite to any blow out

C. Deep system: I detect pattern or occluded

*** Perthe's test:**

- Tie a bandage around foot , leg , thigh → closure of all superficial system and ask patient to walk for 5 mins
- Result:
If deep system is occluded: severe bursting pain as blood can't return; only route is sup. System which is occluded by bandage
But this test is subjective as we depend on patient which feels pain so we use modified perthe's test

*** Modified parthe's test:**

- Tie only one bandage around the sapheno femoral junction & ask pt. to walk
- Result
If deep system is occluded → engaged superficial system & the pt. feels pain
So this test is better as it is subjective & objective

VIII. DIAGNOSIS:

Diagnosis | A case of bilateral 1ry vv affecting long sphenous system , not complicated

Results of special tests

- 1- Sup. Valves are incompetent
- 2- Incompetent perforator below knee & incompetent communicators above knee
- 3- Deep system is patent

Defend your diagnosis

- 1- Defend VV.: because there are dilated elongated tortous veins + pain characteristic of VV
- 2- Defend why 1ry: from history + inspection + palpation + test

NBs | Mursay's test:

Pt. lies on bed & elevates his leg 30° → emptying his long saphenous vein.
And then ask him to cough & inspect the sapheno femoral junction for reflux.
N.B: Reflux occurs whether the Pt. is standing or lying down, but we make him sleep so that we see the reflux.

مبني عملشي الاختبار ده بس لازم تبقي عارفه .

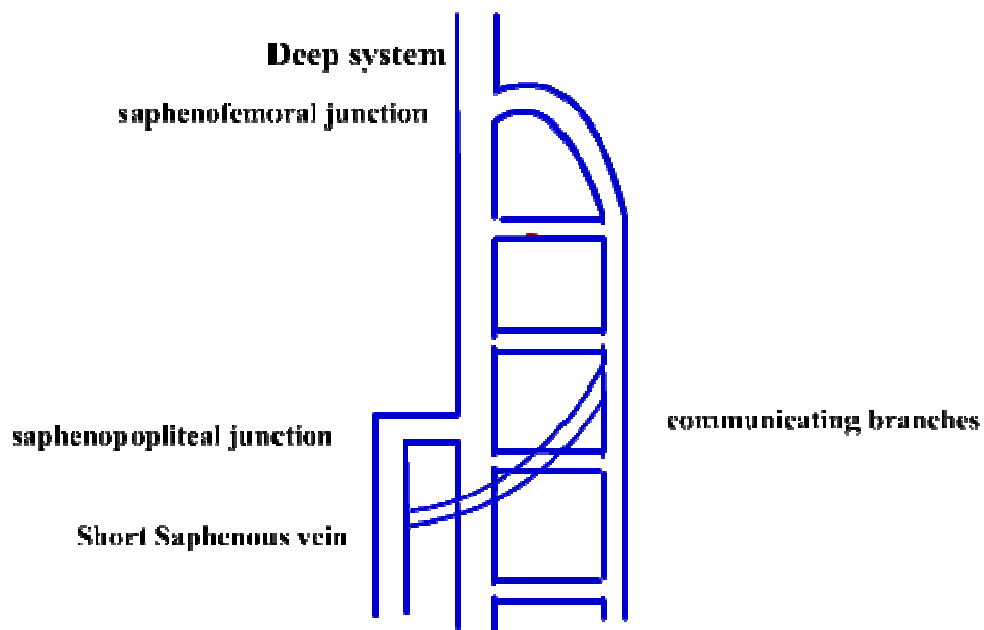
Can we do a test similar to Trendle berg test & multiple tourniquet test in short saphenous vein?

Yes it could be done but you should care for the following:

There are branches which communicate the short saphenous with long saphenous & during the test we close the sapheno popliteal junction. These branches will carry blood to the short saphenous vein & give false results.

-So to avoid this false result:

You should apply tourniquet above the knee to close the communicating branches between long & short saphenous.



BREAST VI**Table BREAST SHEET**

I. PERSONAL HISTORY	As usual but we add 2 items: Menstrual history: menarche and menopause Lactation history: how many child she lactated
II. COMPLAINT	
III. PRESENT HISTORY	
Swelling: OCD	بدأت مره واحده ولا سنه سنه بتزيد ولا بتقل؟ بقالها اد ايه؟
Pain	فيه وجع؟ مكانه؟ نوعه ايه؟ ايه الى بيزوده؟ ايه الى بيخففه؟ بيسمع فى اى مكان؟ هل بيزيد مع الدوره؟
Disturbance of function	
I. General Manifestations:	
a) constitutional manifestations	سخنت؟
b) symptoms of metastasis	من غير ما تسأل مافيش
c) general etiology: T.B. is very important	جالك درن قبل كده؟
II. Local Manifestations	
- VAN: especially Lymphatic of Upper limbs	هل ايدك ورمت؟
- Bone: although carcinoma may be attached to chest but this is a sign not a symptom	
- Discharge:	فى افرازات؟
- Local manifestation: skin manifestations	هل فيه حبيبات؟ احمرار . قرح؟
Trauma	اتخبطت فى صدرك؟
Investigations and ttt.	هل عملتى اى اشاعات او تحاليل؟ أخذتى علاج؟
IV. PAST HISTORY	
V. FAMILY HISTORY	

Table **EXAMPLE FOR READING**

- A female patient named 50 years old, lives in Giza, Married for 25 years and has 3 offsprings, the youngest is 13 years old, she lactated her 3 off springs. Her menarche was at 13 years and she didn't reach menopause. No special habits of medical importance
- She is complaining of a breast lump in the left side for 3 months now.
 - The condition started suddenly when the patient noticed that breast lump while taking a bath, it shows a progressive course.
 - The condition is associated with pain in the form of heaviness recurring with each cycle and not referred
 - There is history of discharge, its greenish in color and odorless
 - There is no history of fever
 - No history of metastasis in the form of
 - No history of T.B.
 - No history of U.L. edema
 - No history of skin ulceration, eczema, pigmentation
 - No history of trauma
 - No history of previous investigations nor ttt
- There is no history of Dm nor hypertension, there is history of appendicectomy 5 years ago, without any complications, done at Kasr al Ainy hospital.
- There is history of radical mastectomy in her mother
- No history of DM nor hypertension in her family

NB | write all the positive data 1st in chronological order then write the negative data in the order of the general frame

VI. GENERAL EXAMINATION:

- If your case is a long case , you must do the following
 - 1- Vital signs: blood pressure, pulse , temperature and respiratory rate
 - 2- Head & neck : for jaundice pallor and cyanosis
 - 3- UL for edema
 - 4- Chest for TB or metastasis
 - 5- Abdomen: for hepatomegaly or umbilical nodules
 - 6- Lower limb: for metastasis
- If your case is short: just look for upper limb for edema

VII. LOCAL EXAMINATION:

1. Inspection:

First comment on:

1- Breast:

- Position
- Size, level, symmetry, contour,
- Skin: for nodules, ulcers, pigmentation , peau d'orange

2- Nipple:

- Erosion: as in Paget disease
- Retraction

3- Areola: look for a swelling in areola called Montgomery follicles which are enlarged sebaceous glands in lactating females

4- Mass(6S): site , size, shape , surface, skin overlying, other swellings

5- Axilla and supraclavicular lymph nodes: they are part of other swellings but we made them as a separate item so as you don't forget it, if there is no original mass

Table	EXAMPLE FOR INSPECTION
1-	The breast is normal in position , size, level , symmetry and contour with normal skin
2-	The nipple is not eroded nor retracted
3-	Normal areola
4-	There is no mass in breast
5-	There is no mass in axilla or supra clavicular region

2. By palpation:

A. Mass: TT 4S CE 3S

Start in normal side (central)

Start palpating 4 quadrants, tail, and retroareolar first by finger tips then palm of hand

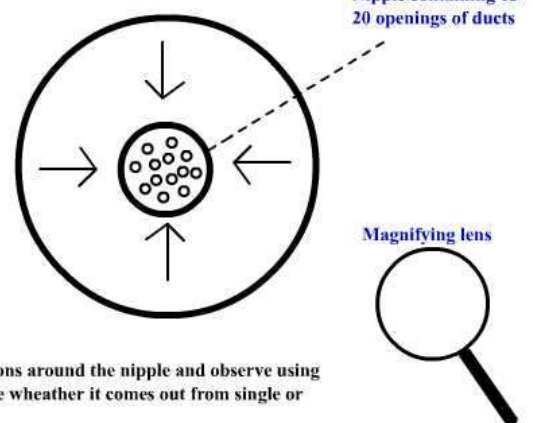
- Tender or not
- Temperature warm or not
- 4S: site , size, shape, surface → surface we feel it by hooking from undersurface of the breast it may be: look diagram
- Color
- Edge
- 3S :
surrounding structures

a) **Skin:** by pinching of skin over mass

b) **Breast tissue (cooper's ligament):**
push the breast tissue down with your hand

and try to move the mass up and down with your other hand

DIFFERENTIAL PRESSURE TESTS



press from all directions around the nipple and observe using magnifying lens to see whether it comes out from single or multiple ducts

c) Muscles:

- Pectoralis major: ask the patient to contract her pectoralis major muscle (by pushing against her waist) and try to move the mass upwards and laterally and in opposite direction
- Detect fixation to serratus anterior muscle (if the mass is in lower quadrant:====> ask the patient to contract her serratus anterior muscles (by pushing your shoulder), then try to move the mass horizontally
- There are no special characters but please remember the following:
 - Feel the mass by your finger tips and palm of hand
 - If felt by finger tips only==>benign condition fibrocystic disease
 - If felt by finger tips and palm of hand==>this could be serious

B. Nipple and areola: if the patient has discharge so you should do the differential pressure test using magnifying lens

Technique:

- Ask the patient to fix her breast while she is lying down
- Then press all around the areola to see discharge is coming from single or multiple ducts

C. Axillary & supraclavicular LN

Table	EXAMPLE FOR PALPATION
-	There is a breast mass felt by finger tips but not the palm of the hand
-	It is not warm not tender
-	In upper outer quadrant, 4x6 cm, oval in shape, with globular lower border
-	It is soft in consistency and well circumscribed
-	Not fixed to skin, pectoralis major or serratus anterior, not fixed to bone, mobile within breast
-	No axillary or supraclavicular LNs

VIII. DIAGNOSIS:

Say the following statement: the surgeon's duty is to consider any breast mass malignant until proved otherwise.

- If your case is malignant: mention staging
- If your case is a benign mass: say for excisional biopsy

Oral | How to know if mass is fixed to pectoral fascia & not pectoralis major muscle?

-If mass is fixed to the pectoralis major muscle:

When muscle is relaxed:

عقدة في حبل

When muscle is contracted: No movement at all.

-If mass is fixed to pectoral fascia but not to pectoralis major muscle:

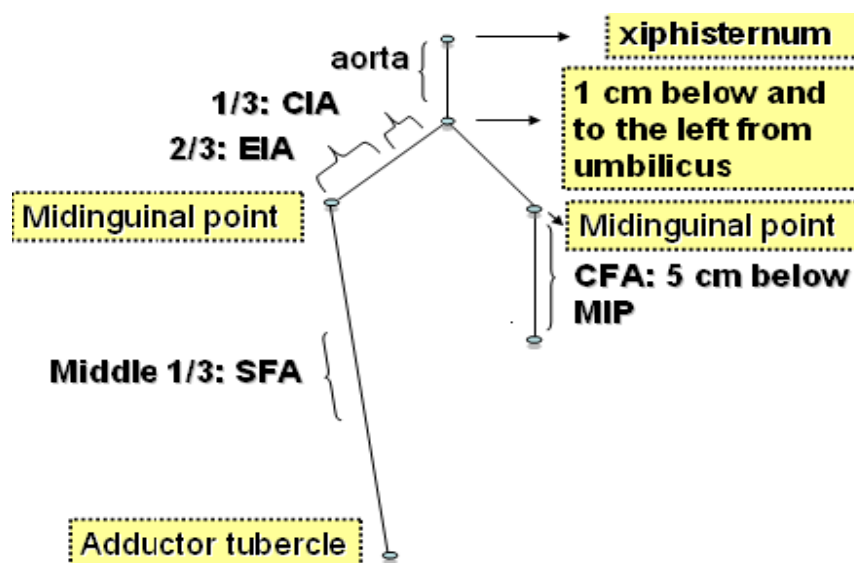
When muscle is relaxed: the mass can be moved in 2 directions as fascia is lax.

When muscle is contracted: Movement is limited in both directions but degree of limitation is less than mass fixed to muscle.

ISCHEMIA VII

Pulses

You have to feel dorsalis pedis, popliteal, femoral and radial pulses routinely.
Arterial pulsation in the lower limbs



CIA: common iliac artery, upper 1/3 of line between MIP & point 1cm below and LT from umbilicus.

EIA: External Iliac artery, lower 2/3 of line between MIP & point 1cm below and LT from umbilicus.

Common Femoral Artery

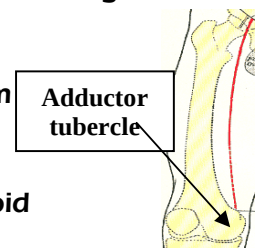
Common femoral artery, patient's hip is flexed abducted and externally rotated, better against head of femur. At mid-inguinal point below inguinal Ligament

Superficial Femoral Artery

Superficial femoral artery, hip flexed and abducted. Along middle 1/3 of line from midinguinal point to adductor tubercle.

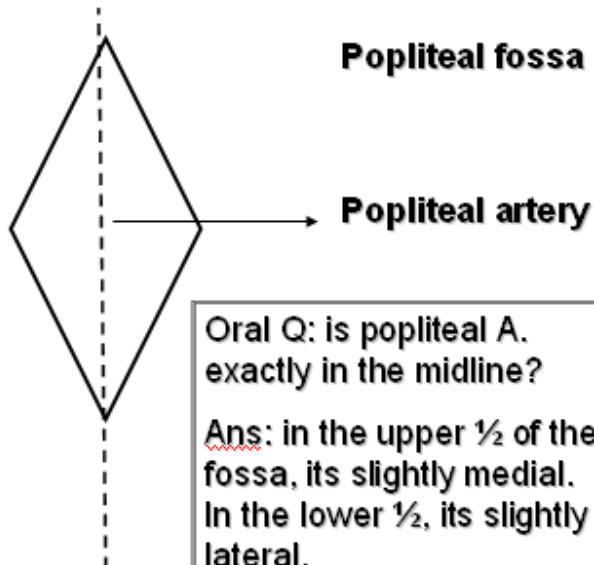
Aorta

Felt in the midline and a little to the left above umbilicus ايد بتحس، ايد بتزق فوقها to avoid tickling the patient.



POPLITEAL ARTERY

CFA: common femoral artery



Oral Q: is popliteal A. exactly in the midline?

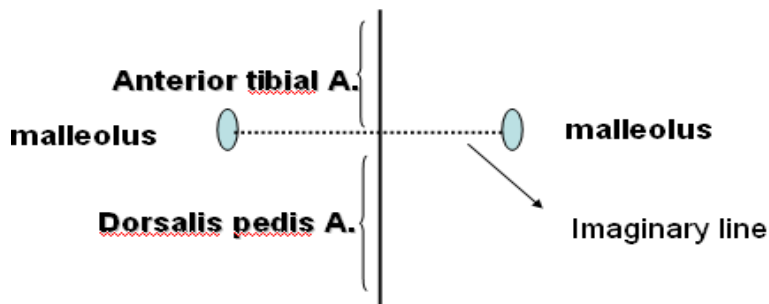
Ans: in the upper $\frac{1}{2}$ of the fossa, its slightly medial. In the lower $\frac{1}{2}$, its slightly lateral.

HOW TO FEEL POPLITEAL PULSE?

a- Flex patient's knee with 2 thumbs on tibial tuberosity, all fingers in middle of popliteal fossa (for lower part against tibia)

b- patient on the face, flex knee by 1 hand and feel pulse (upper half against femur)

ANTERIOR TIBIAL , POSTERIOR TIBIAL & DORSALIS PEDIS ARTERY PULSATIONS



ANTERIOR TIBIAL: against tibia, above ankle midway between malleoli

POSTERIOR TIBIAL: midway between medial malleolus and tendo-achilles.

**DORSALIS PEDIS:**

Here, it pierced deep fascia so not felt
Feel it lateral to tendon of extensor hallucis longus (against navicular bone)

Table	Arterial Pulsations in The head and Neck
Radial Artery	Against lower radius, between radial styloid & tendon of flexor carpiradialis
Ulnar Artery	Lateral to tendon and flexor carpiulnaris against lower ulna
Brachial Artery	
Upper part	Against medial side of humerus, standing by patient's side, your thumbs on lateral side of arm, rest of your fingers on medial side to feel pulse. (if patient is too obese, put your palm on medial side)
Lower part	In anticubital fossa, medial to tendon of biceps, opposite humerus, back of extended elbow is supported
Axillary Artery	Upper ½ of line between middle of clavicle and point midway between humeral condyles. Felt like brachial A. upper part, but with thumbs on acromion, and fingers pushed high in axilla.
Subclavian Artery	Stand behind the patient. Felt in supraclavicular fossa, within, 1 inch above middle 1/3 of clavicle, press downwards and posterior against 1 st rib.
Carotid Artery	Don't feel both sides in the same time
Facial Artery	Junction of anterior border of masseter & mandible. Ask patient to clinch to feel masseter.
Superficial Temporal Artery	In front of tragus.

ISCHEMIA TABLE

The following table includes the local manifestations present in acute and chronic ischemia and shows which local manifestations are asked about in history and which are seen by inspection and which are detected by palpation.

Table	ISCHEMIA TABLE				
Manifestation	Acute	Chronic	His.	Ins.	Palp.
Pain	+++++++	Int. claudication or rest pain	Yes	No	No
Paralysis	Yes	No paralysis (may be weakness or wasting)	Yes	Yes	Yes

NMT10 | Clinical Surgery for 6th year

Parathesia	Anesthesia	Parathesia (irritation or dec. sensation)	Yes	Severe only	Yes
Pulseless	Yes	Yes	No	No	Yes
Pallor	Yes	No or postural or fixed (depending on severity)	Yes	Yes	No
Possible gangrene	Moist	Dry	Yes	Yes	Yes
Coldness	Yes	Yes	Yes	No	Yes
Trophic changes	No	Yes	Yes	Yes	Yes
V. filling time	No	Yes	No	Yes	No
Superficial Thrombophlebitis	No	Only in beurger	Yes	Yes	Yes
Impotence	No	Le Riche syndrome	Yes	No	No
Capillary circulation test			No	Yes	no

How to interpret the table?

For example pain it is severe in acute ischemia , intermittent claudication in chronic ischemia , we ask about it in history , but we cant inspect or palpate the pain

Another example : pallor is present acute ischemia , colour changes are present in chronic ischemia we ask about it and we inspect it but we cant palpate colour changes

In other words

In History we ask about pain , paralysis , parathesia , pallor , possible gangrene , coldness , trophic changes , superficial thrombophlebitis and impotence

By Inspection : we can see paralysis , parathesia in severe cases , pallor , possible gangrene , trophic changes , venous filling time , superficial thrombophlebitis and capillary circulation test.

By Palpation: we can detect paralysis , parathesia , pulses , possible gangrene , coldness , trophic changes , superficial thrombophlebitis.

Ischemia Sheet

Table	Ischemia Sheet
I.PERSONAL HISTORY	as usual
II.COMPLAINT	pain (better say pain than other complaints as coldness/weakness, to avoid questions of DD)
III.PRESENT HISTORY	عندك كلاكيع فى رجلك؟
Swelling: aneurysm causes ischemia (acute and chonic)	

Pain:

OCD, site, precipitating and relieving factors

N.B. pain in calf muscles means superficial femoral artery is blocked, so, no popliteal pulse can be felt.

عندك وجع في رجلك؟
 المريض: لما بامشى، قفشة في السمانة وحرقان في كف
 رجلى من تحت
 بعد اد ايه مشى؟
 المريض: في الأول كنت بامشى ٥٠٠ متر واستريح ٥
 دقائق، دلوقتى زادت، بامشى ١٠٠ متر واستريح ١٠ دقائق
 في رجلين الاثنين؟
 ايوه
 دلوقتى عندك حرقان في وش رجلك أما ترفعها؟ ويروح أما
 تنزلها؟ لا

General etiology:

cardiac disease (Atrial Flutter causing embolism)

عندك مشاكل في القلب؟
 المريض: لا

Common association:

Angina, stroke, Transient Ischemic Attacks, hemiplegia

جالك شلل نصفي؟
 المريض: لا

Local:

رجلك ضعفت؟
 رجلك نعلت؟
 لونها اتغير؟ كائنك سألته و قال لك لا، وعلق عليها في ال
examination
 رجلك اسودت؟
 رجلك سقعت؟
 جالك فيها قرح، أو وقع شعر رجلينك؟
 جالك فيها خطوط حمراء بتوجعك وتسخنك؟
 الانتصاب عندك طبيعى؟

Trauma:
Investigations and ttt:

اتخبطت في رجلك؟ لا
 عملت أشعات؟ اخذت أدوية؟ عملت عمليات؟
arteriography أشعة بالصبغة =
Lumbar sympathectomy scar
Chest x-ray
 رسم قلب

عندك اى مرض مزمن: سكر، ضغط؟ لا

IV.PAST HISTORY
V.FAMILY HISTORY

حد في عائلتك عنده نفس حالتك؟ لا

+ve findings in this patient

Pain, weakness, parasthesia, gangrene, sympathectomy.

Example on how to write present history in such a patient

The condition started 22 years ago, with intermittent claudication in the calf muscles after 500 meters walk, relieved by rest for 5 minutes. The condition is progressive in course, as now, the patient can walk for only 100 meters before he feels pain, and he has to rest for 10 minutes. With onset of the condition, the patient complained of weakness and parasthesia in his lower limbs, 2 years later, he complained of blackening of his toes, with spontaneous separation. He had an arteriography, a CXR, and an echocardiography. He had lumbar sympathectomy done ... years ago. There is no history of cardiac or ischemic heart disease, no history of cerebral ischemia, no superficial thrombophlebitis, impotence, coldness, color or trophic changes.

VI. LOCAL EXAMINATION

Expose both Lower limbs

Examine both lower limbs

Examine the back of LL خلى العيان يلف

Table	LOCAL EXAMINATION
Inspection	Palpation
a) Etiology	a) Etiology
b) Chronic ischemia from table	b) Chronic ischemia from table
c) DD	c) DD

1. Inspection:

A. Etiology:

Look for swelling/scar along the course of the artery

B. chronic ischemia from table:

- Wasting
- Amputation
- Color changes (pallor) :

قول للعيان ينام

color changes مفيش

ارفع رجليه

Classic 5 degrees by 5 degrees, but this is time consuming.

I know from history that the case is moderate ischemia (claudication distance 100 meters)

So, elevate 40 degrees first, and then increase the angle gradually.

When pallor occurs, calculate the angle (Beurger's angle)

- ulcers: comment on TEB 2S
- loss of hair of LL
- VFT:

دور على vein مليون

ارفع رجل العيان لحد الـ vein ما يفضى

نزل رجليه ودلدها، واحسب الوقت اللى حايتمل فى

If you can't find an obvious vein, don't perform the test.

- Red streaks of superficial thrombophlebitis
- Capillary circulation test:

دوس فى اى حته

Blanching occurs

شيل ايدك

Color returns but slowly (sluggish circulation)

C. Differential Diagnosis:

- Flat foot
- Varicose Veins

Examples for Inspection

- There are no scars or swellings along the course of the artery
- No Paralysis or wasting , No color changes
- There is bilateral amputation of the lateral 4 toes.
- there are no ulcers, there is loss of hair from the level of mid leg
- Venous filling time couldn't be assessed as there wasn't prominent vein
- There are no red streaks
- There is sluggish return of capillary circulation
- No flat foot or varicose veins

2. palpation:**A. Etiology:**

Feel a swelling along the course of the artery

B. chronic ischemia from table:

- Motor examination
- Examine sensations:
 - Hand at leg then abdomen: حاسس رجلك زى بطنك؟
 - Hand at ankle then knee: حاسس انهى احسن؟ (to detect level)
 - Hand at left LL then at the Rt LL (to compare)
- Pulse
- Coldness:
 - Hands at: foot – ankle – mid leg
 - Not cold with sympathectomy (vasodilatation)
- Streaks

C. Differential Diagnosis:

- Osteoarthritis:
 - اثنى رجله وافردها
 - Feel crepitus
- Sciatica (leg elevation test)
 - ارفع رجله وهى مفرودة
 - أسأله على وجع

NB | Don't forget: heart and pulses

Examples for Palpation

- There are no swellings along the course of the artery
- There is weakness and parasthesia more on the left side
- There is hyposthesia with a level at the mid leg.
- Lt leg is cold up to the midleg.
- Rt is not cold (as the pt had sympathectomy—> VD)
- No tender streaks, No osteoarthritis, No sciatica
- Then you must comment on pulses

3. Special tests:

Adson's deep breathing test: later on

Allen's test:

A normal person can live with either one radial or ulnar artery alone. But some people have predominating radial / ulnar artery. This test aims to detect predominating radial/ulnar arteries, important prior to operations.

- Ask the patient to clench his fist while occluding radial artery → pallor → unclench → pink hand again normally.
- If clench → pallor → unclench → pallor = occluded ulnar artery.
- Repeat with occluding ulnar artery.

VII. DIAGNOSIS:

Bilateral chronic ischemia, affecting both UL & LL, most probably arteritis (Beurgers only in LL) due to femoropopliteal block. It is a moderate ischemia complicated by gangrene of lateral 4 toes and distal phalanges of medial 4 fingers bilaterally.

الدفاع عن التشخيص:

Ischemia: 6P, CTF, 3

Arteritis: DD with beurgers

Level: site of claudication, level of absent pulse, level of trophic changes, level of hyposthesia and level of coldness

Degree: moderate as its not in the criteria of severe ischemia.

LYMPHADENOPATHY VIII

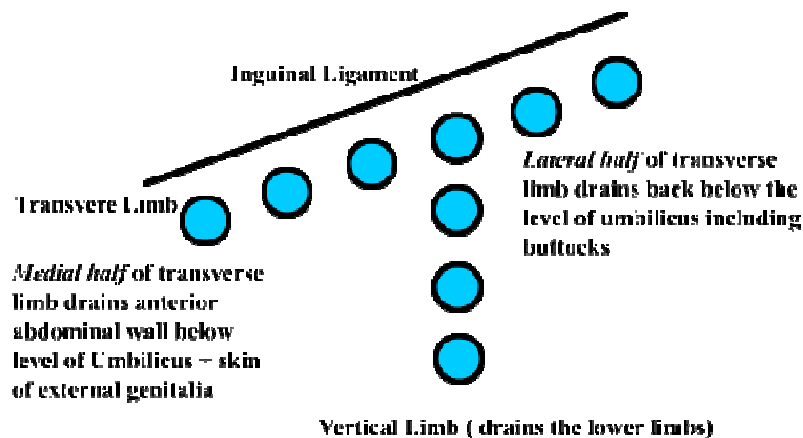
1st we must know the lymphatic drainage of every part in our body.

LYMPH DRAINAGE BELOW LEVEL OF UMBILICUS:

1st inguinal L.N.S:

There are 2 groups (Superficial & deep ing. L.N.S)

Superficial group → drains → deep group



Superficial Inguinal Lymph Nodes

NB	Testes is drained into paraortic L.N.S & not the inguinal L.N.S
Clinical Application	If a pt. has ulcer in leg: → look at the vertical group of sup. Ing. L.N.S If a pt. has ulcer in skin of scrotum → look at medial half of transverse limb of sup.ing.L.N.S.

LYMPH DRAINAGE ABOVE THE LEVEL OF UMBILICUS

Axillary L.N.s: 5 groups

- 1) Anterior group (pectoral group)
- 2) Lateral group
- 3) Posterior group (subscapular group)

These are 3 groups drain into

4) Central group in center of axilla

& the central group drains into

5) Apical group

* Anterior group drains anterior abdominal wall above umbilicus, till chest wall till neck

* Posterior group: drain back above umbilicus till neck

* Lateral group: drains upper limb

LYMPHATIC DRAINAGE OF HEAD & NECK

Cervical L.N.S:

4 groups

* Skin of neck is drained into → superficial longitudinal group

* Skin of head is drained into → outer circular group

Deep longitudinal is end station of lymphatics in head & neck

1) Superficial longitudinal:

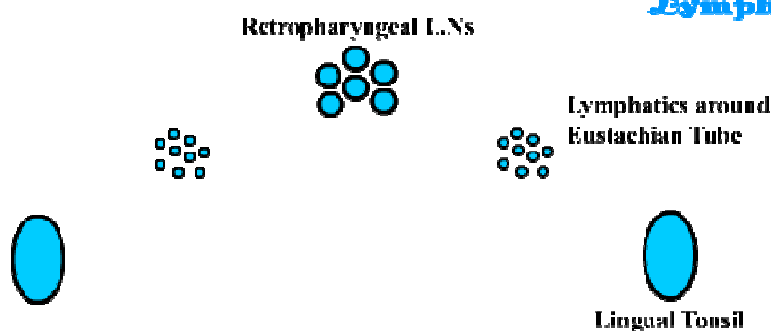
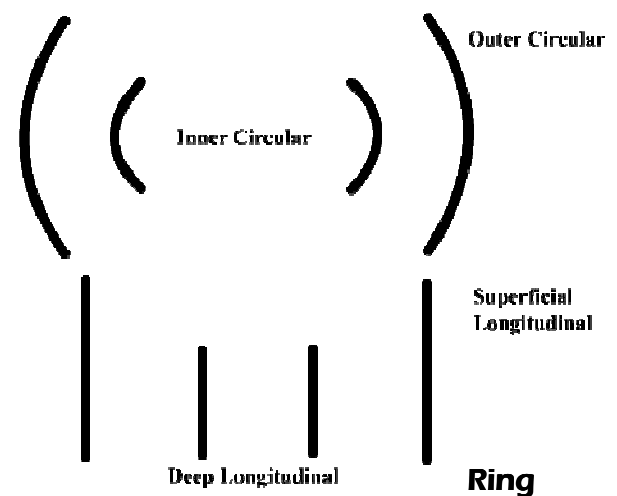
* Behind sternomastoid muscle

* In posterior triangle

* Just below the skin

drain into → deep longitudinal group

2) Inner circular group: Waldeyer's



Waldeyer's Ring (inner circular group)

* This ring lies in oral cavity & pharynx

So to examine it use tongue depressor & inspect

* You can only see the lingual tonsils

Tonsils are not enlarged وعلى طول التعليق:

بس تأكد أولا ان العيان مهملة عملية اللوز وشالهم ولو طلع عمل عملية يبقى التعليق

Tonsils are surgically removed

3) Outer circular group: complete circle

Submental. Submandibular, parotid, pre auricular, postauricular, mastoid (occipital L.N.S)

*Some doctors consider also pretracheal & pre laryngeal L.N.S a part of outer circular
لا تذكرهم الا لو سؤلت عنهم → circular

LOCATION AND DRAINAGE OF EACH GROUP & DRAINS

- 1-Submental L.N.S: below the chin drain skin of the chin.
- 2-Submandibular L.N.S: below the mandible drain skin of face overlying parotid gland
- 3-pre auricular: in front of auricle drains half of skin of forehead.
- 4- post auricular: behind the auricle drains the skin of the temple
- 5-occipital L.N.S: lies midway between mastoid process & posterior occipital protuberance. Drains the remaining part of scalp

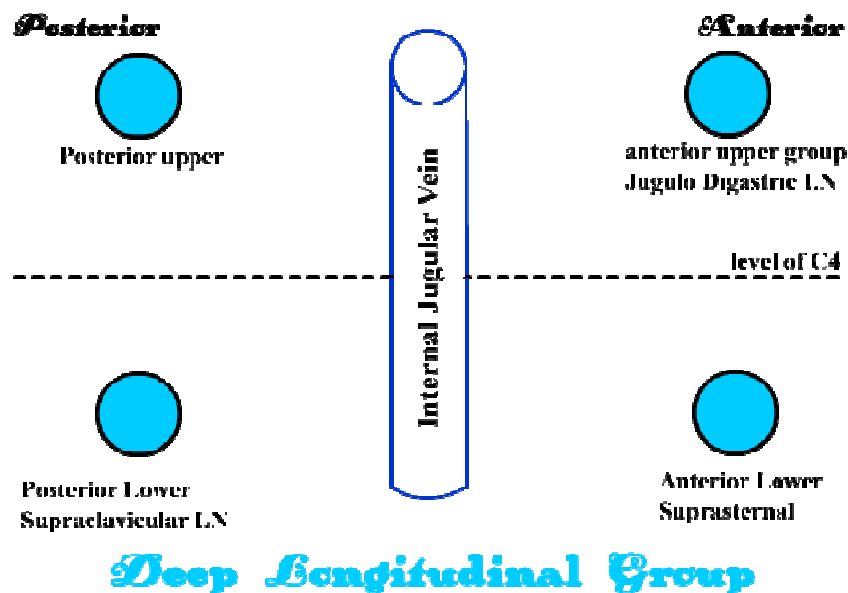
4) Deep longitudinal:

Table	Lyymphadenopathy Sheet
I. PERSONAL HISTORY	as usual
II.COMPLAINT: swelling + site	بتشتكي من ايه؟ كلا كيع في جسمي
III.PRESENT HISTORY	
Swelling:	بدأت مره واحده ولا سنه سنه بتزيد ولا بتقل بقالها قد ايه
Pain (as acute septic is painful & late metastatic)	فيه وجع؟
Disturbance of function:	عادة مبنسألش على Syphilis بس لو الدكتور سالك العيان ازاى هنقوله انك سألته ← دمك انترفز قبل كده -جالك درن قبل كده =جالك طفح جلدي -عندك كلكوعه في جنبك الشمال (only in located swelling)
1- General:	
A. Fever	
B. Metastasis	
C. GM: Not important	
D. General etiology: (T.B, Syphilis, leukemia, lymphoma, spleen, rash, catchment area)	
E. Common association:	Not important
2- Local:	
A. VAN (depend on site) if cervical swelling → dyspnea, dysphagia, hoarsness If axially → VAN of upper limb If inguinal → VAN of lower limb	صوتك اتغير ، البلع بيتعبك، عندك صعوبه في التنفس ايدك بتورم رجلك بتورم
B. Bone	
C. Local Manifestations	Not Important
D. Discharge: because of TB	هل عندك افرازات
Trauma: Only in localized lymphadenopathy & not generalized	هل اتخبطت؟
Inestigatios and ttt:	عملت اشاعات ، تحاليل، محاليل عملت عملية في الغده خدت Chemotherapy جالك Lymphoma
IV.PAST HISTORY	عملت عمليات قبل كده؟ عندك اي مرض مزمن سكر ، ضغط
V.FAMILY HISTORY	حد في عائلتك عنده نفس المرض حد عنده سكر، ضغط

EXAMPLE FOR HISTORY**Present history: +ve data → swelling, fever, lymphoma, chemotherapy**

The condition started 2 years ago when the patient noticed swelling in different parts of his body which started gradually with progressive course

The condition is associated with fever which recur every 2 weeks

The pt. says he has lymphoma for which he received chemotherapy

-No history of pain

-No symptoms suggestive of metastasis in the form of.....

-No history of T.B, Syphilis, leukemia, rash

-No history of Dyspnea, dysphagia, hoarseness, U.L. edema., L.L. edema

-No history of discharge.

-No history of trauma

VI. GENERAL EXAMINATION

As usual

But don't forget abdomen to detect the spleen if enlarged

VII. LOCAL EXAMINATION:

Similar to any swelling

1. Inspection:

8s: Site, Shape, Size, Surface, Skin, Special characters, other swellings, surrounding structures.

But surrounding structures increased:

*relation of lymph nodes to each other:

-Discrete.

-Matted: Fused but you can count them

-Fused (amalgamated): you can't count them.

Always make the comment on inspection as follows:

I can't see swelling that I can inspect

2. Palpation:

1st choose the biggest group of L.N.S

& then describe it as any swelling (TT 4S C E 3S)

Then enumerate other affected groups

TT 4S C E 3S → (Tenderness, Temperature, site, size, shape, surface, consistency, edge, surrounding structures, other swellings, special characters)

And for details of each refer back to swelling sheet

Table HOW TO PALPATE LNS

LNS IN HEAD AND NECK

Use tongue depressor to view the inner circular group
Always comment: tonsils are not enlarged.

Submental LN	Roll your hand below the chin.
Submandibular LN	Tilt the head of the patient to the same side and roll your hand below the mandible so that the L.N.s are rolled between your hands and the mandible
Pre auricular LN	Roll your hands in front of auricle
Pre auricular LN	Roll your hands behind the auricle.
Occipital LN	Roll your hand midway between mastoid process & occipital protuberance.
Pretracheal & pre laryngeal	(Delphic LN)
Superficial longitudinal group	Palpate behind the sternomastoid muscle.
Upper deep cervical	Pinch in front of sternomastoid
Suprasternal LN	Pinch in front of sternomastoid low in neck
Supraclavicular LN	Behind medial 1/3 of the clavicle

AXILLARY LNS

your position	دخل ايدك الشمال تحت باط العيان و يبقى ذراع العيان مسنود على ايدك الشمال اسند بايدك الشمال لقدام وايدك اليمين تزق من برا
Central group LN	بنغرف ال floor of axilla
Lateral group LN	Palpate against the neck of humerus
apical group LN	غلط انك تحسها بس لو طلب منك يبقى زق بايدك من تحت وايدك الثانية من فوق
Subscapular LN	باسند بايد من جوا والايد الثانية من برا ورا العيان
Epitrochlear LN	1 inch above medial epicondyle عشان تحسها خلي العيان يسند كوعه على ايدك وتحس ال N.L. بصباغك الكبير Thumb

ABDOMINAL AND INGUINAL LNS

Abdominal LN	as if palpating the abdominal aorta but you roll your hand to feel if there's LN
---------------------	--

EXAMPLE FOR COMMENTS ON INSPECTION & PALPATION**By inspection:**

I couldn't see any L.N. that I can inspect

By palpation:

*there are enlarged submandibular L.N.S

*Not warm, not tender

* shape is rounded , 2X3 cm , smooth surface

*Firm in consistency

*L.N.S are discrete

There are also enlarged supraclavicular, bilateral central axillary, bilateral inguinal L.N.S

DIAGNOSIS AND DEFENSE**Diagnosis**

A case of generalized lymphadenopathy, affecting bilateral submandibular, bilateral supraclavicular, bilateral central axillary, bilateral inguinal L.N.S

Most probably Hodgkin's lymphoma stage 3BS

Defend your Diagnosis

-Why lymphoma?

As there are multiple swellings in anatomical sites of LNS

-Why Hodgkin?

As the nodes are firm discrete & received chemotherapy

-Why stage 3BS?

III→ involvement of both sides of diaphragm

B→ general manifestations as fever, night sweats & weight loss

S→ Spleen is enlarged

SWOLLEN LIMBS IX

- Causes**
- Part of generalized edema: Cardiac, Renal & Hepatic.
 - As localized edema:
 - Haematoma.
 - Inflammatory: Cellulitis.
 - Sarcoma.
 - Miscellaneous: Post-Phlebitic limb & lymphedema

NB If the case is swollen limb Post-Phlebitic → you will manage it as a case of varicose veins

Table Lymphadenopathy Sheet

I. PERSONAL HISTORY

as usual

II.COMPLAINT:

swollen limb & you must mention Rt or Lt

شكوتك ايه؟؟ انهى رجل؟؟

III.PRESENT HISTORY

Swelling:

رجلك اليمين ورمت؟؟
بدأت من إمتي؟؟
مرة واحدة ولا سنة سنة؟؟
بتزيد ولا بتقل؟؟

Pain

فيه وجع؟

Disturbance of function:

General:

في سخونية؟؟

A. Fever

B. Metastasis

C. GM: Not important

D. General etiology: Cardiac, Renal, Hepatic & History of D.V.T.

E. Common association:

Scrotum as it may be enlarged.

عندك مشاكل في القلب او الكلي او الكبد / جالك Heparin
جلطة واخذت
عمليات في الحوض ، نمت فترة طويلة؟؟

هل في ورم في حثة تانية في جسمك؟؟

Local:

A. VAN

B. Bone

C. Local Manifestations:

Ask about complications of post phlebitic limb & lymphedema as ulcers, pigmentations & recurrent streptococcal infections

عندك دوالي في رجلك؟؟

Not Important

عندك بقع في رجلك؟؟

هل رجلك كانت بتسخن وتحمر وكنت بتاخذ مضاد حيوي وهل كانت بتخف ولا لا؟؟

D. Discharge:	في افرازات من رجلك؟؟
Trauma:	اتخبطت في رجلك؟؟
Investigations and ttt:	عملت أي أشعة ، تحاليل ، محاليل خدت علاج أو عملت عملية؟؟ عملت عملية قبل كذا؟؟ بتأخذ أدوية معينة؟؟سكر أو ضغط؟؟ حد في عائلتك عنده سكر أو ضغط؟؟
IV.PAST HISTORY	
V.FAMILY HISTORY	

EXAMPLE FOR PRESENT HISTORY

+ve Data in this patient: swollen & recurrent attack of streptococcal infection

Mansour Amin Ahmed, 37 years, living in Ayat العياط, Porter, married since 10 years, has 3 children, the youngest is 3 years, he takes 20 cigarettes/ per day for 10 years.

The pt is coming complaining of swelling in RT leg, with gradual onset, progressive course, for 23 years & history of recurrent attack of streptococcal infection.

There is no history of: Pain.

There is no history of: Metastasis in the form of

There is no history of: Cardiac, Renal, Hepatic problem.

There is no history of : D.V.T

There is no history of: Varicose veins.

There is no history of: Leg ulcers, Discharge or Pigmentations.

There is no history of: Trauma.

The Pt didn't do any Inv. or ttt.

VI.GENERAL EXAMINATION:

As usual

Since the case may be 2ry to v.v, so the abdominal examination is imp.

VII.LOCAL EXAMINATION:**GOLDEN RULES**

- 1- Expose both.
- 2- Don't forget the back.
- 3- Examine Normal side 1st.

1. Inspection: consider limb as a swelling & describe:

8 S (Site, size, shape, surface, skin overlying, special characters, surrounding structures, other swellings).

But notice the followings:

1. **Size:** is measured here by using a tape to measure circumference of limb & comparing it with the normal side. يعني يقيس الرجلين السليمة والمريضة.
2. **Shape:** Diffuse & detect if ankle crease is preserved.
3. **Other swellings:** Only detect any L.N enlargement.
4. **Surrounding structures:** Only detect varicose veins.

EXAMPLE FOR COMMENT ON INSPECTION

- There is swelling affecting RT leg & foot (Site).
- Circumference is 36 cm while normal side is 23 cm (Size).
- Swelling is diffuse with preserved ankle crease (Shape).
- NO pigmentation, NO ulceration (Skin overlying).
- No swollen L.N (Other swellings).
- He has 1ry varicose veins as long saphenous vein is enlarged in thigh (Surrounding structure)

2. Palpation: as any swelling

T T 4S C3S

(Temperature, Tenderness, Site, Size, Shape, Surface, Consistency, Other swelling, surrounding structure, Special characters).

N.B: There is NO Edge.

▪ Consistency:

Edema is pitting or Brownly Edema (hard).

EXAMPLE FOR COMMENT ON PALPATION

- The swelling is not hot, not tender.
- There is Non Pitting edema.
- Rest of comment as inspection

DIAGNOSIS AND DEFENSE

Diagnosis

Swollen RT lower limb, most probably lymphedema, not complicated

Defense

Why lymphedema?

We excluded general causes of edema due to:

-History: Normal Heart, Kidney & Liver.

شأنیه سليم

-General Examination: No abnormality in Heart, Kidney & Liver.

-Local Examination: Unilateral swelling.

So, the remaining possibilities:

Lymphedema OR Post Phlebitic limb

But can't be Post Phlebitic limb as there is no pain, ulcerations or pigmentations.

So, it is Lymphedema as the pt is coming from endemic area العياط.

THYROID X

Thyroid Sheet

Table

Thyroid Sheet

I. PERSONAL HISTORY

as usual

II. COMPLAINT

swelling in lower part of front of neck.
Make it always swelling to avoid entering in D.D. of other complaints
(Ex. Loss of weight has many other causes).
N.B.: the only case in which the complaint can't be swelling is 1ry toxic goiter as the gland is not very large, so in this case make the complaint a group of toxic manifestations.

شكوتك ايه؟

خليلها دائماً swelling

III. PRESENT HISTORY

Swelling:

بدأت مرة واحدة ولا سنة سنة ؟
بتزيد ولا بتقل؟
بقالها كم سنة؟
المريض : مرة واحدة ، بتزيد و
بقالها ٦ سنين

Pain:

فيه وجع؟ لا

Disturbance of function :

❖ General

- a- Fever
- b- Metastasis:
- c- General Manifestations: Toxicity or hyperthyroidism & we must comment on it even if -ve.

سخنت؟ لا

قالواك عندك الغدة نشيطة وعملت
عمليات
لقبت الهرمونات عالية وخذت
?carbimazole
المريض: اه
وعادة مفيش
hypothyroidism

❖ Local:

- a. VAN: pressure on Recurrent Laryngeal nerve causing hoarsness.
- b. Local manifestations:
 - Dysphagia: usually not as it occurs in Retrosternal goiter or malignancy
 - Dyspnea:

صوتك اتغير؟ اه
من امتي؟
المريض : عملت عملية في الغدة
من خمس سنين ونص وصوتي
اتغير بعدها بشهرين
البلع بيتعبك؟ لا
التنفس بيتعبك؟ متصدقوش حتى لو
قالك اه !!!

Trauma: not physical trauma it is psychological trauma.

هل حصلتلك صدمة عصبية؟
المريض: لا

Investigations & treatment:

عملت اي اشاعات ، تحاليل ، محاليل ؟
عملت مسح ذري وهرمونات
هل عملت او خدت علاج ؟ عملت عملية
من ٥ سنين ونص.
قعدت قد ايه كويس بعد العملية؟ شهر
ونص والغدة كبرت تاني وعيني طلعت
لبرا والحاجة بقت بتقع من ايدي
عملت هرمونات بعد العملية؟ اه وطلعت
عالية.
ماشي على علاج ايه دلوقتي؟ **Inderal**

IV. PAST HISTORY

عملت عمليات قبل كذا؟
ماشي على علاج معين؟
عندك مرض مزمن ، سكر او ضغط.

V. FAMILY HISTORY

حد في العائلة زيك؟
سكر ، ضغط.

+ve findings in this patient

swelling, toxic
manifestations, Inv & ttt,
recurrence, hoarsness,
medical ttt.

N.B.: IMPORTANT HINTS IN HISTORY TAKING

➤ In manifestations of toxicity:

They are very misleading & you may diagnose the case toxic & it is just simple nodular.

فتسأله هل قالولك الغدة نشيطة؟ وعملت تحاليل لقيت الهرمونات عالية ؟
وخذت **carbimazole & inderal** ؟

لو العيان قالك اه ← يبقى احترامها واسأل باقي الاسئلة **toxicity**
لو قالك لا ← برضو احتياطي اسأل عن كل عرض بس خليك مستبعد **toxicity**

-How to ask about tremors?
الكبايات بتقع من ايديك ؟

- Hypothyroidism: always say no history of hypothyroidism as cases are very rare.
So write No history without asking & if there is a case you will know it easily.

N.B.: SCENARIO OF THIS PATIENT

- this patient gave a history of swelling in neck + toxic manifestations
- He did investigations & proved toxic.
- then he was treated by surgery.
- recurrence after operation & hoarsness .
- Why rapidly recurred?
- As the pt. is 25 years now & he had operation since 5 & 1/2 years & surgery is contraindicated before 25 years due to high risk of recurrence
- He is now on medical ttt with Inderal.

THYROID**EXAMPLE FOR HISTORY TAKING**

- ———, 25 years, mechanic, not married, living in Giza, takes 20 cigarettes per day for 10 years.
- He is coming complaining of swelling in lower part of neck since 6 years.
- The condition started 6 years ago with swelling in lower part of front of neck, gradual onset, and progressive course.
- He had toxic manifestations in the form of palpitation, Nervousness. Irritability, insomnia, loss of weight inspite of good appetite, exophthalmos , polyuria.
- The patient did hormonal assay & was told that he is toxic.
- He had surgery since five & half years, in Demerdash hospital.
- After one 7 half month, the swelling appeared again, exophthalmos & he developed hoarsness of voice.
- He is now on course of Indral.
- There is no history of pain.
- There is no history of metastasis in the form of
- There is no history of hypothyroidism as gain of weight, slurred speech, intolerance to cold weather, puffy eyelids & lost 1/3 of outer eyebrow, constipation
- No history of Dyspnea or Dysphagia.
- No history of Discharge.
- No history of Psychological trauma.
- No past history of operations, drug intake, D.M. or hypertension
- No family history of similar conditions or D.M. or hypertension.

VI. GENERAL EXAMINATION:

- 1- As usual, but here don't forget Pulse.
& you should know all of its abnormalities from written.

2- Eye Manifestations:

Table	EYE MANIFESTATIONS
Signs	How to detect it?
A- Infrequent blinking.	By Inspection
B- Apparent rim of sclera above cornea.	By Inspection
C- Staring look & lid lag :	ثبت رأس العيان حرك صباغك من فوق لتحت وقول للعيان يبص على صباغك. في الطبيعي : الجفن ينزل مع حركة العين. لو في lid lag : الجفن هيتاخر قليلاً في النزول مع حركة العين
D- Lack of wrinkling of forehead on looking up.	ثبت رأس العيان تحرك صباغك من تحت لفوق وتشوف هيجصل عنده wrinkling of forehead؟؟؟
E- Lack of convergence:	ثبت رأس العيان حرك صباغك من بعيد لقريب ما بين عينين العيان وشوف هيجصل convergence ولا لا؟؟؟

In brief: How to examine eye signs?

Inspect & comment on infrequent blinking & Exophthalmos.

Then fix patient head & move your finger to detect lid lag, lack of wrinkling on looking upwards & lack of convergence.

N.B: Also, you must examine the scalp for metastatic masses.

Table	TESTS TO DIFFERENTIATE BETWEEN TRUE & FALSE EXOPHTHALMOS
Name of Test	Technique
A. Ruler test:	تجيب مسطرة وتحطها على العين Supra orbital & infra orbital ridges المفروض تلمس فوق وتحت
B. Navzenger's method:	بتقف ورا العيان وتبص على عينه من فوق .. الطبيعي انك ما تشوفش العين طالعة لبرا لو شفتها ← True exophthalmos
C. Russel Frazer test:	بتبص على العيان من الجنب Normally, there is a groove between eye ball & supra orbital margin. Loss of this groove → True exophthalmos.

3- Tremors:

- In out stretched hands.
- Protruded unsupported tongue.

خليه يغمض عينه ويبعد صوابه

VII. LOCAL EXAMINATION:

- 1- **Inspection:** inspect thyroid while deglutition.

8 S (site, size, shape, surface, skin overlying, surrounding structures, special characters, other swellings).

N.B: inspect for pulsation tangentially (it is pulsating in case of toxic goiter).

THYROID COMMENT ON INSPECTION

- Swelling in Swelling in the lower part of the front of the neck.(site)
- Moves up & down with deglutition.(special character)
- Deep to Sternomastoid. (relation to surrounding structures)
- Butterfly in shape. (shape)

لازم تبدأ بالأربع جمل دول عشان تقول للدكتور انا بتتكلم عن ال Thyroid

- Size 3 × 1 cm.
- Smooth surface.
- Skin show no D.V but there is a scar of pervious thyroidectomy which healed by 2ry intention.
- Pulsating.

2- Palpation:

Table WAYS OF PALPATING THYROID GLAND

Method	Technique
A. Crayel Method:	if gland is small palpate using thumb & from front.
B. Lahey`s Method:	you push the gland from one side & you feel it from the other side.
C. Classic Method:	• You stand behind the pt. • Your thumb on his nape & rest of fingers in front. • Flex neck to relax muscles & fascia of neck.

ازاي بقى تحسها؟؟؟

بتزق بإيدك الشمال الغدة لجوا ناحية ال **Trachea**

وتزق بإيدك اليمين لورا

وتقول للعيان ابلغ ريقك

اللي هتحسه بيتحرك تحت إيدك هو ال **Thyroid**

Palpate for: TT 4S CE 3S

Tenderness , Temperatre , Site, size, shape, surface, consistency, edge (8 lower edges for retro sterna extension), other swellings (Cervical L.Ns), special characters (move up & down with deglutition).

Table RELATION TO SURROUNDING STRUCTURES

Structure	Technique
Skin:	Pinch the skin over thyroid gland
Sternomastoid:	قول للعيان يثني رأسه وأمسك العضلة وقول لعيان ابلع ريقك شوف الغدة هتعارف تتحرك ولا لا Moves up & down → not attached Doesn't move Up 7 down → attached.
Carotid artery pulsation:	May be displaced in large benign lesions. Absent in malignancy.
Trachea:	فعد العيان .. ثبت رأسه بايدك الشمال
Detect whether it is deviated or not:	Suprasternal notch Index ال اليمين دخله في ال وبصباغك ال
Detect whether thyroid is fixed or not to the trachea:	Resistance ال الناحيتين لغاية اما تحس ال حركها بالطول (عقدة في جبل)

N.B: WHEN YOU STARED TO COMMENT ON THYROID, YOU MUST BEGIN WITH:

Swelling in the lower part of the front of the neck.
Moves up & down with deglutition.
Butterfly in shape.
Deep to Sternomastoid.

لازم تقول كذا في الاول عشان نفهم الدكتور انك بتتكلم عن ال Thyroid

❖ You comment on larger lobe & it is enough to say that other lobe is enlarged.

Comment EXAMPLE FOR PALPATION

- Swelling in the lower part of the front of the neck.(site)
 - Moves up & down with deglutition.(special character)
 - Deep to Sternomastoid. (relation to surrounding structures)
 - Butterfly in shape. (shape)
 - Surface is nodular. (surface)
 - Not worm, not tender. (TT)
 - Mass about 3 × 1 cm. (size)
 - Firm in consistency. (consistency)
 - Well defined edge, lower edge is felt, No thrill.
 - No palpable cervical L.Ns. (Other swellings)
 - Skin is not attached. (surrounding structures)
 - Not attached to the surrounded. (surrounding structures)
 - Not attached to trachea. (surrounding structures)
 - No displaced or absent carotid. (surrounding structures)
-

3- **Percussion:** over manubrium to detect retrosternal extensions.

Table DIAGNOSIS AND ITS DEFENSE

Diagnosis:	Defend your diagnosis:
A case of recurrent 1ry toxic goiter not complicated.	1. Goiter: 4 sentences. 2. Toxic: from history: ... From general examination: From local examination:

ABDOMEN XI

Table

Thyroid Sheet

I. PERSONAL HISTORY

Occupation/residence are very imp. Example:

بتشتغل ايه؟ عامل
عامل طول عمرك؟ لأ كنت فلاح قبل كده
فين؟ فى الصعيد

II.COMPLAINT

ايه شكوتك؟
تقل فى جنبى
الشمال ولا اليمين؟

III.PRESENT HISTORY

Pain:

التقل عندك من امتى؟ ١٥ سنة
مرة واحدة ولا سنة سنة؟
ببزيدي؟ لا
نوع الوجع؟ تقل (قول من النظرى)
بيسمع؟ لأ
ايه ببزوده؟ المجهود
وايه بيقلله؟ الراحة

Swelling

عندك كلاكيع فى جسمك؟

Disturbance of function :

a. General

- ❖ Fever
- ❖ Metastasis:
- ❖ General etiology: causes of hepatosplenomegaly

سخنت؟ لأ

- Hemolytic anemia
- Lymphoma
- Pruritis/bone aches/LN enlargement
- Jaundice
- Leukemia
- Bleeding tendency/bone aches
- Bilharziasis
- TB

جالك قبل كده تكسير فى الدم وانتقلك دم كثير؟
عندك كلاكيع فى جسمك؟

جالك الصفراء قبل كده؟
دخلت مستشفى الحميات؟

فى دم بينزل من اللثة؟

جالك بلهارسيا؟ ايوه
امتى؟ من وأنا ١٥ سنة
اتعالج ازاي؟ حقن (major trauma)
→ hepatitis
جالك درن؟

- Chest symptoms

Upper abdominal pain
Exclude hemoptysis (with history
hematemesis)
Just comment, don't ask

- In case of left hypochondrial pain only, ask about:

Typhoid
Malaria
Rheumatic fever (infective
endocarditis)

جالك تيفود؟
مالاريا؟
عندك حمى روماتيزمية مزمنة؟

b- Local:

Gastric and Oesophageal :

- dysphagia
- Vomiting
- Hematemesis and melena

البلع ببتعبك
بترجع؟
رجعت دم وجبت براز أسود من تحت؟ أه
تقوم تدلعه:
كام مرة؟ ٢
امتى أول مرة؟
وبعد الوجع بأد ايه؟
كميته اد كبايه كده؟
روحت المستشفى؟
انتقلك دم؟
دخلت فى غيبوبة؟
عملت منظار أو حقن؟
طبيب تانى مرة كانت امتى؟
وتكملة الأسنلة كلها فى كل المرات

Intestinal symptoms:

Constipation, diarrhea, bleeding per rectum

عندك امساك؟ اسهال؟ دم احمر فى البراز؟

Liver symptoms:

Jaundice, ascites, LL edema, hepatic coma

حصلك اصفرار (لون البول والبراز) ؟ استسقاء
او رجلك مورمة؟ غيبوبة كبد؟

Spleen:

Bleeding tendency, easy fatigability,
recurrent infections (comment all, ask only
bleeding)

لما تتعور بتنزف زيادة؟

Kidney:

Stones, hematuria

عندك حصاوى؟ دم فى البول؟

Genital:

Impotence/menstrual disturbances

الانتصاب عندك طبيعى؟
الدورة منتظمة وطبيعية؟

Trauma:

اتخبطت في بطنك؟
عملت عمليات في بطنك؟
الزائدة وقرحة في المعدة
من أمتي؟
من ٥٠ و ٢٥ سنة

Investigations & treatment:

عملت اشاعات و تحاليل و محاليل

IV. PAST HISTORY

V. FAMILY HISTORY

+ve findings in this patient

+ve history of bilharziasis and surgical trauma in this patient (appendicectomy and peptic ulcer surgery) can be put in past history, or better be put at the end of (+ve) findings in present history.

VI- GENERAL EXAMINATION:

Don't forget LEFT supraclavicular node (vercow's)

Malignant left supraclavicular node due to inphradiaphragmatic malignancy

VII- LOCAL EXAMINATION:

- You will examine:
 - Abdomen
 - Back
 - External genitalia
- You will expose the patient from
 - Nipple line (as lower chest problems cause pain radiating to upper abdomen)
 - Till knee (strangulated obturator hernia causes pain to knee along descending genicular branch of obturator nerve)
- Patient is supine, with flexed knee (to relax fascia and muscles, by obliteration of lumbar lordosis)
- Doctor stands on the right side of the patient, Left kidney can be examined from right or Left side of the patient
- During palpation, ask the patient to take deep breath through his/her mouth
- Your hands must be warm

Table SCHEME FOR INSPECTION & PALPATION OF ABDOMEN

Inspection	Palpation
• <u>Abdomen</u> 1. Contour: 2. Localized bulge: (8S) 3. Movements: ✓ Respiration ✓ Peristalsis ✓ Epigastric pulsations 4. Vertical line: ✓ Subcostal angle ✓ Divarication ✓ Umbilicus ✓ Pubic hair 5. Skin	• <u>Abdomen</u> • Superficial 1. Tenderness 2. guarding 3. rigidity • deep 1. tenderness 2. swelling 3. organs • <u>scrotum</u> • <u>back</u>
• <u>Genitalia</u>	• <u>Genitalia</u>
• <u>Back</u>	• <u>Back</u>

Percussion

- organs
- swelling
- ascites

N.B. STANDARD COMMENTS IN ORAL

Item	Comment
• Hepatomegaly in liver cirrhosis:	1) Firm 2) Sharp border 3) +/- nodular surface
• Congested Splenomegaly is:	1) Firm 2) Smooth surface 3) Sharp edge 4) +/- notch
• Oral: why did you say its portal HTN not malignancy?	Say comment of congested splenomegaly
• If you were told to examine for ascites/HSM	Perform formal abdominal examination (inspection-palpation - percussion..etc...)

Inspection:

- **Abdomen:** stand at the patients feet

1- **Contour**

§ Some oral Questions about contour:

- Normal: concave flanks, flat umbilical region
- Loss of waist = fatty abdomen (umbilicus will be tucked in, unlike everted umbilicus in intra-abdominal causes of distension)
- Bulging flanks = ascites
- Central distension = pregnancy & ovarian cyst
- Peripheral distension = colonic obstruction
- Generalized distension: 5F (fat, fluid, flatus, foetus, fibroid)

2- **localized bulge:** 8S

- Site: in which of the 9 quadrants
- Size, shape, surface, skin overlying, other swellings.
- Surrounding structures: relation to muscle
(carnett's test) قول للعيان بهم براسه أو يرفع رجله
✓ Swelling becomes more prominent: superficial to muscles
✓ Swelling becomes less prominent: deep to muscles
✓ Swelling did not change: muscular swelling
- Special characters:
 - a- pulsations: transmitted/expansile
 - b- relation to re
 - c- spiratory movements:
 - With deep breathing,
 - ✓ swelling moves up and down = intra-abdominal, related to diaphragm
 - ✓ Swelling moves anteroposterior: ant. Wall swelling
 - ✓ Swelling does not move: intra-abdominal not related to diaphragm, or intra-abdominal fixed, or retro-peritoneal.

3- **Movements:**

- Respiratory:
 - ✓ Comment: abdomen moves freely with respiration, in females it is thoraco-abdominal, in males it is abdomino-thoracic.
 - ✓ Oral important: loss of respiratory movements = peritonitis /hemoperitoneum (due to irritations of parietal peritoneum)
- Epigastric
- Intestinal

4- Vertical line:

- Subcostal angle:
 - ✓ Normally almost 90 degrees (70 – 90)
 - ✓ Narrow in tall patients
 - ✓ Obtuse in : ++ intra-abdominal pressure, upper abdominal swelling, short patients.
- Divarication of recti:
 - ✓ Done by wither raising the head unsupported or by carnet test (raising legs)
 - ✓ Occurs in: ++ intra-abdominal pressure & weak ant. Abdominal wall.
- Umbilicus:
 - ✓ Normal: midway between symphysis pubis and xiphisternum, inverted, no impulse on cough, no discharge, no dilated veins, no fistula, no nodules.
 - ✓ If shifted up: lower abdominal swelling
 - ✓ If shifted down: upper abdominal swelling
 - ✓ If tucked in: obesity
 - ✓ If everted/flat: ++ intra-abdominal pressure
- Hair distribution:
 - ✓ Feminine distribution: upper straight line
 - ✓ masculine distribution: triangle with apex extending till umbilicus
 - ✓ Feminine distribution occurs in males with excess estrogen (ie. Liver cell failure)

5- Skin:

- Scar: site,size,healing, impuse oncough
- Pigmentation: around umbilicus (Cullen's) & in the loins (grey turner's sign) both occur in pancreatitis.
- Spider nevi (dilated arterioles in distribution of SVC)
- Dilated veins (say site, & direction of flow of blood – as blood either fills the veins from SVC or from IVC, so you put 2 fingers apart on the dilated vein after emptying it, then remove the lower finger, if it doesn't fill but fills when u remove your upper finer, it means it fills from upwards, and vice versa)
- Itching marks e.g. obstructive jaundice
- Herpes zoster
- Nodules
- Campel Demorgan spots: elevated red spots in abdominal wall thought to occur with internal malignancy but now are proved to be non-specific.

B- back:

- Spine deformities
- Fullness in renal angles (concave point between last rib and sacrospinalis)
- Swelling e.g. pott's/secondaries.

c- genitalia:

- Importance of examination of genitalia in abdominal cases: (imp)
 - 1) Bilharzial mass
 - 2) TB cord (TB abdomen)
 - 3) Hernia (with abdominal mass)
 - 4) Varicocele (2ry) with renal mass
 - 5) Testicular atrophy with liver cell failure
 - 6) Undescended testicles (abdominal, malignant testis)
 - 7) Testicular tumours (as testis is drained by para-aortic LNS → abdominal mass)
 - 8) Epididymo-orchitis (refers pain to Ipsilateral iliac fossa) تحت عمل وجع فوق
 - 9) Ureteric stone: causes pain in scrotum فوق عمل وجع تحت

Palpation:

- With the flexor surface of your hand, not with finger tips.
- When deep palpation is difficult, use 2 hands, one over the other .
- Start from the farthest point to pain (if there is pain)

Superficial palpation:

- § Oral question:
- ✓ Guard: voluntary muscle contraction, disappears on expiration.
- ✓ Rigidity: involuntary continuous muscle contraction, even during expiration. (localized or diffuse)
- ✓ No rigidity in: (not imp)
 - DKA, uremia, post-operative peritonitis.

Deep palpation:

Refer to pages 44 – 49 in the book.

Normal comment in anything is extremely important

Oral

- ✓ Differences between intra-abdominal and parietal swelling (not imp)
 - 1) Relation to abdominal muscles
 - 2) Movement with respiration
 - 3) If it extends above costal margin = parietal

Percussion:

abdominal organs, ascites, and swelling (if present)

Auscultation:**ORAL AUSCULTATION OF ABDOMEN**

Sound	Technique
1) Intestinal sounds (3-5 / min)	In lower right quadrant Absent in: peritonitis, ileus Hyperaudible & frequent in: mechanical intestinal obstruction
2) Venous hum = Kenawi sign	Below xiphoid process in Egyptian HSM Louder in inspiration.
3) Bruit	along course of aorta, common and external iliac arteries, renal artery or any vascular swelling.
4) Peritoneal rub:	friction sound in peritonitis
5) Succussion splash:	pyloric obstruction.

PR/PV: لا يسأل، لا يعمل

Diagnosis	§ Anatomical; system affected § Etiological and pathological § Functional: presence of complications/organ failure/compensation in case of HSM as explained later in the case
------------------	---

Diagnosis in a case of Jaundice	§ Anatomical: jaundice § Pathological: hemolytic/obstructive/hepatocellular § Etiological: calculi/malignancy § Functional: manifestations of liver cell failure.
--	--

EXAMPLE LOCAL EXAMINATION OF ABDOMEN**Comment** **Technique**

By inspection, no bulging flanks, no localized bulge, and abdominal wall is free with respiration.

I can see epigastric pulsations
Subcostal angle is...

قول للعيان: اكتب نفسك، خذ

وتبص من عند رجليه على epigastric pulsations

There is/is no divarication of recti
Umbilicus shows no dilated veins, no nodules, no discharge. It is not shifted

هم براسك\ارفع رجلك

NMT10 | Clinical Surgery for 6th year

And there is no impulse on cough
Pubic hair shows masculine/feminine distribution.

قول للعيان يكح

There is no impulse on cough in hernia orifices

قول للعيان يكح

Inspection and palpation scrotum: as in inguinoscrotal sheet

Skin shows 2 scars: one is from a paramedian incision, 20 cm, healed by 2ry intention, and the other is Mcburney's incision, 5 cm, healed by 2ry intention. There is no pigmentation, no dilated veins, no nodules.

Study the following:

By inspection, no mass no deformity

By palpation, no tenderness

By percussion, renal angle is resonant

قول للعيان يقعد

Back examination

Palpation in the back is done with closed fist, for tenderness. Also in renal angle (which is a point not an area between last rib and sacrospinalis muscle.

Comment: no superficial tenderness, no guarding, no rigidity.

قول للعيان ينام
دفي ايدك

Sup. palpation: start from the farthest point

وعينك على وش العيان

Spleen:

e.g. swelling in the left hypochondrium, smooth, firm, sharp border, oblong in shape, moves freely, notch is felt in its anterior border, I cant insinuate my hand between it and costal margin (=I cant get upper border of the mass). I cant push it to renal angle, its dullness is in continuity with normal dullness of spleen, renal angle is resonant.

deep palpation for organs:

تقول للعيان ياخذ نفس، وانت ايدك ثابتة على بطنه، فال
يخبط في ايدك. اوصفه
واوعى تقول على طول لقيت spleen
لازم توصف الاول

If you cant feel spleen:

جيب العيان على جنبه اليمين، وايدك الشمال تحت ال
costal margin

If you still cant feel it:

Hooking: (you can do it with your left hand)

Dipping

Liver palpation:

Start with percussion to get the upper border

Globular, cystic smooth mass. Dullness is continuous with normal dullness of liver.

Gallbladder:

مالهاش طريقة
وانت بتحس ال liver

Ascites:

Oral: examine for minimal ascites:

While patient is lying on his back, percuss just above umbilicus. If resonant → knee elbow position and percuss the same point above umbilicus. If it turned dull = minimal ascites, if still resonant = no ascites.

If the point above umbilicus is dull from the beginning while the patient is lying on his back, say knee elbow position will not work for this patient.

Table DIAGNOSIS AND ITS DEFENSE	
--	--

Diagnosis:

A case of **hepatosplenomegaly, portal hypertension**. Hepatocellularly compensated, vascularly decompensated, Maybe **post bilharzial**, and maybe **post hepatic**. Associated with Rt 1ry vaginal hydrocele.

Defend your diagnosis:

- **HSM:** comments on liver and spleen (in Lt hypochondrium, smooth, notch..etc..)
- **Portal HTN:** splenomegaly, cirrhotic liver, hematemesis and melena, dyspepsia.

Etiological:

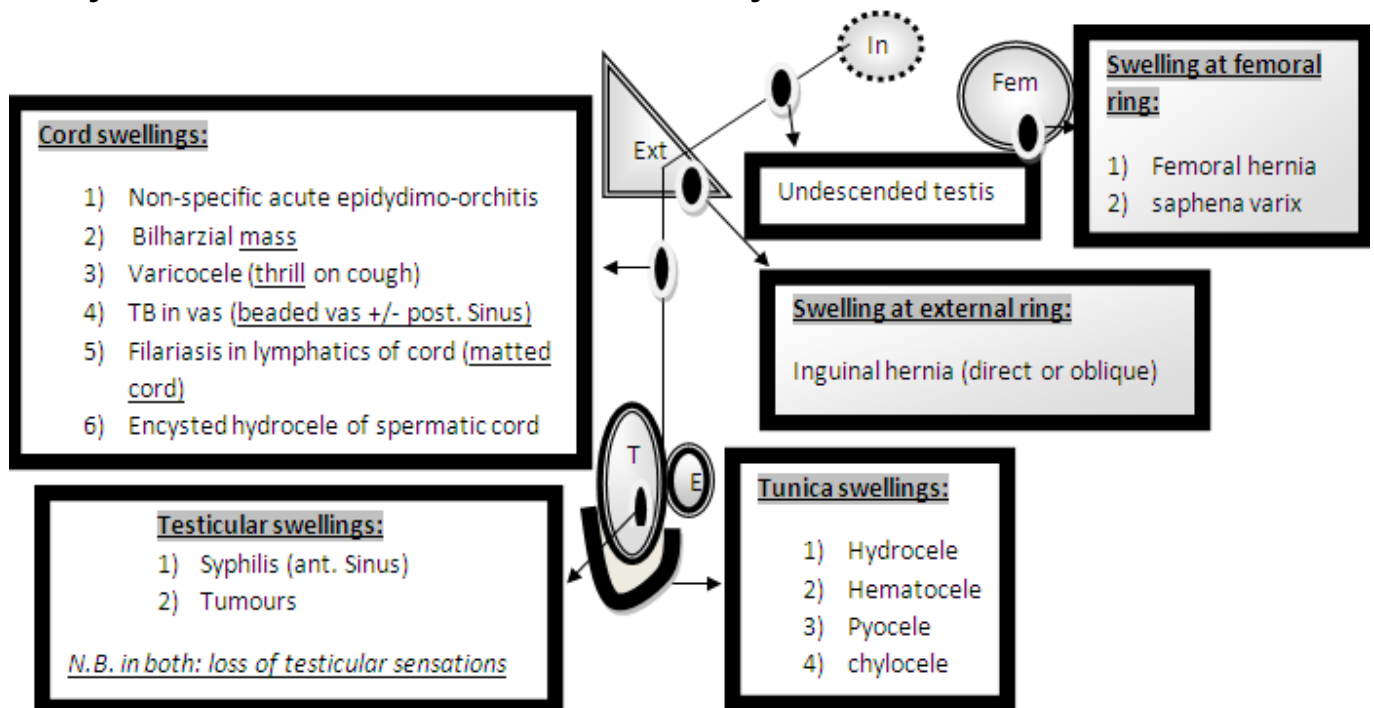
- **Post bilharzial or post hepatitis:** history of bilharziasis treated by injection (major trauma as long ago they used the same syringe for all patients)

In portal HTN, you have to comment on:
Liver cell failure (symptoms/signs) = hepatocellular decompensation.
Hematemesis = vascular decompensation

HERNIA XII

SWELLINGS IN INGUINOSCROTAL REGION :

Study their names as we will ask about it in History



Table

Hernia Sheet

VIII. PERSONAL HISTORY

occupation is very imp

بشتغل ببيع

بيع ايه

IX. COMPLAINT

شكوتك ايه؟

كلكوعة في خن وركي الشمال من ٣ سنين

X. PRESENT HISTORY

بتعرف ترجعه؟

وبتطلع تاني؟

ولما بترجعه بتحس أنك عايز تدخل الحمام؟

وبيزيد لما بتحرق؟

Pain:

فيه وجع؟

Painless unless complicated (usually not in exam)

Disturbance of function :❖ **General****a- Fever**

سخت؟

b- Metastasis:

N.B. Don't mention metastasis in sheet swelling متدلج

c- General Manifestations:➤ **Strangulation**

Comment: no history suggestive of previous attacks
strangulation in the form of acute pain, distension,
vomiting, constipation.

جالك اختناق فى الفتق قبل كده ونقلوك
المستشفى؟

d- General Etiology:➤ **Straining:**➤ **Increased intra-abdominal pressure (abdominal mass)**

N.B.: if the patient is a chronic heavy smoker, comment on
chronic cough at the end of (+ve) without OCD,
because most probably cough is due to heavy smoking.

بتحرق مع البول أو البراز؟

عندك كلاكيع فى بطنك؟

e- Common Associated:➤ **VV/varicocele/flat foot**

عندك كحه؟

عندك دوالى فى رجلك أو الخصية؟

عندك بواسير؟

Flat foot**Trauma:**➤ **Surgical trauma –appedectomy:**

عملت الزائدة؟

Investigations & treatment:

عملت أنفحوصات؟

اخذت أى علاج؟

استخدمت حزام؟

عملت عمليات؟

ايوه عملت عملية فتق الناحية الثانية

أمتى؟

من ٤ سنين

XI. PAST HISTORY**XII. FAMILY HISTORY****+ve findings in this patient**

3 years, متدلج, chronic
cough, common

association, surgical trauma

VI- GENERAL EXAMINATION:

Don't forget abdomen

e.g. condition is associated with epigastric hernia & bilateral VV

VII- LOCAL EXAMINATION:

GR:

1. Expose both
2. Compare
3. Start by examining normal side
4. Don't forget the back of the lesion

you will examine:

1. external genitalia
2. bilaterally, inguinal region
3. bilaterally, femoral triangles
4. perineum

Patient is standing during examination; he lies down at the end of the examination for:

1. Perineum
2. Reducibility
3. Relation to pubic tubercle
4. Internal ring test

1- Inspection

1. Swelling:

- Look at the swelling(to observe **7S**: site, size, shape, surface, skin, special chch & other swellings)
- Ask the patient to cough
- Then look at the back of the scrotum
- Then cover the patient and start talking
- By inspection, swelling in the RT inguinoscrotal region, 20*12 cm,in shape, in surface, skin shows no dilated veins, no scars no sinuses. impulse is present on cough **شايف وانا مش شايف** inguinal LNS

2. Scrotum:

- Normal comment: 2 full compartments, with median raphe, no dilated veins, no scar no sinuses
- e.g Assymetrical compartments
- No dilated veins, no scars, no sinuses (no anterior nor posterior sinus)

3. Penis:

- Normal comment: No hypospadias, no epispadias, no meatal stenosis, no ulcers
- Meatal stenosis during examination of penis= strains during micturition (hernia)

4. Perineum: when patient lies down

2- palpation: 4S TT CE 3S**1. swelling****Site:**

Hold neck scrotum

If swelling if completely above your hand → inguinal

If swelling if completely below your hand → scrotal

If the swelling is inbetween your hands → inguinocrotal swelling.

Size**Shape****Surface****Tenderness****Temperature****Consistency:**

(no edgel)

Other swellings: inguinal LNS

Surrounding structures:

Special characters: reducibility and impulse on cough

2. Scrotum

Testis is 1*2*4 cm, firm in consistency, with preserved testicular sensations

تدوس مره واحدة وتسأله حاسس؟

Other testis is atrophic, soft, with preserved testicular sensation.

3. Spermatic cord:

At neck scrotum: thumb anteriorly, one or more fingers posteriorly (both sides)

Comment:

Thickness is equal to that of little finger, can be flattened (unlike filariasis –matted cord), vas is not beaded (unlike TB), no thrill on cough (unlike varicocele)

4. Perineum

When he lies down

➤ Special tests:**➤ External ring test:** invagination test

Not done, study for oral
when he lies down

➤ internal ring test: v imp

when he lies down

➤ **three fingers test (Zeiman's technique):**

not done, imp oral
if no obvious lump
while the patient is standing

index → internal ring
middle → external ring
ring → femoral canal

and ask patient to cough while standing

العيان نام

1. Perineum:

Scar urethral injury → stricture → strains during micturition → hernia

2. Pubic tubercle:

قول للعيان يضم رجليه ضد ايدك

round tendon of adductor longus muscle till insertion امشى مع ال

Pubic tubercle is just above insertion

If hernia is above and medial to pubic tubercle = inguinal hernia

If hernia is below and medial to pubic tubercle = femoral hernia

3. Internal ring test:

Patient lies down

Hernia is reduced

Thumb of opposite hand in internal ring

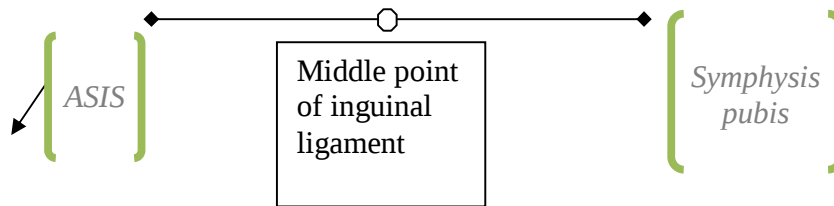
يقف العيان وانت سادد ال internal ring بايدك الشمال وبمساعده يقف بايدك اليمين

يكح العيان وانت سادد ال internal ring

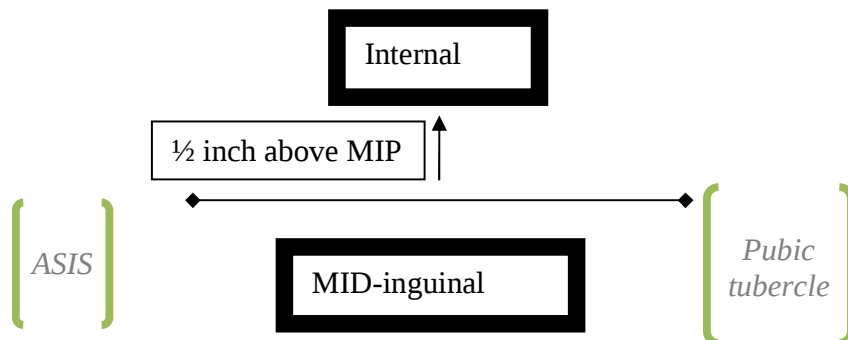
لو نزلت: -ve test = direct hernia

لو مائلتتش: لكن نزلت بعد ما تشيل ايدك من oblique = internal ring

To localize internal ring, find MID-inguinal point, internal ring is ½ inch above it



1st bony prominence as you pass your finger laterally along inguinal fold



4. External ring test : inguinal VS femoral hernia

This test is painful and not accurate

- Patient lies down
- Hernia reduced
- Femoral ring is occluded
- Femoral ring عيان يقف وانت سادد
- inguinal = نزلت ❖ عيان نائم
- External ring occluded
- external ring عيان يقف وانت سادد ال
- عيان يكح وانت سادد
- +ve (=inguinal hernia) = مانزلتش ❖
- impulse حس
- If at tip of your finger = oblique
- If at side of your finger = direct
-

Percussion
Auscultation
Transillumination:

Table DIAGNOSIS AND ITS DEFENSE

Diagnosis:

RT oblique inguinal hernia, funicular type, enterocele, not complicated. Associated with epigastric hernia and bilateral VV, urethral fistula, atrophy of left testis and this patient needs proper pre-operative assessment.

Defend your diagnosis:

- ✓ Hernia: anatomical site + متدلع
- ✓ Inguinal: above and medial to pubic tubercle
- ✓ Oblique:
- ✓ Enterocele:

Hernia is only painful if complicated, so
ماتصدقش العيان قوى (it's painless)

VENTRAL HERNIA CASES

- Paraumbilical
- Epigastric
- & Incisional hernias

History: same as hernia sheet

Examination: same as examination of abdominal cases.

Hints Inguinoscrotal cases:

1. either hernia swelling
2. or swellings other than hernia
3. or pain

بندلع 3 complaint:

OCD + some additional questions = بندلع

1. Trauma causing nerve injury:

اتخبطت امتى وفين وازاى وبأيه؟ واتعالجت ولا لا؟ واتعالجت فين وازاى؟

2. Hematemesis and melena in abdomen

انتفلك دم؟ دخلت فى غيبوبة؟ إلخ...

3. Swelling inguinoscrotal:

وبتزيد اما تحزق؟ وبتعرف ترجعها؟ ولما بترجعها بتحس انك عايز تدخل الحمام؟ طب بتطلع تانى؟

- Swelling inguino-scrotal = متدلع hernia
- لو swelling متدلع، متسألش على metastasis
- Sheet with common association varicocele, flat foot, most probably hernia يبقى متدلع
- Sheet with common association TB, syphilis, discharge = sheet swelling مش متدلع

INGUINOSCROTAL SWELLINGS XIII

Table

Hernia Sheet

XIII. PERSONAL HISTORY

occupation is very imp

بشتغل ببيع

بيع إيه

XIV. COMPLAINT

swelling in LT/RT

inguinoscrotal region

XV. PRESENT HISTORY

Swelling:

❖ OCD

❖ مدلع؟

من أمتي؟

طلعت مره واحدة ولا سنة سنة؟

مش متدلع

Pain:

عندك فيها وجع؟

Disturbance of function :

❖ General

a- Fever

b- No Metastasis:

c- General Manifestations:

❖ Feminization because of testicular tumour

عندك فيها سخونية؟

صوتك رفع؟

صدرك كبير؟

d- General Etiology:

▪ TB

▪ Bilharziasis

▪ Syphilis و انت ما عندكش

▪ UTI

جالك درن؟

جالك بلهارسيا؟

عندك التهابات في

مجري البول؟

e- Common Associated:

▪ Abdominal swelling

عندك كلكوعة في بطنك؟

N.B. filariasis is in general etiology but there are no questions for filariasis in history.

❖ Local

▪ Discharge:

عندك افرازات في الكيس؟

Trauma:

hematocele

اتخبطت في الكيس؟

Investigations & treatment:

عملت أشعات أو تحاليل

أخذت أدوية أو عملت عمليات؟

XVI. PAST HISTORY

XVII. FAMILY HISTORY

+ve findings in this patient

VI- GENERAL EXAMINATION:

don't forget abdomen

VII- LOCAL EXAMINATION:

GR:

- 1- Expose both
- 2- Compare
- 3- Start by examining normal side
- 4- Don't forget the back of the lesion

YOU WILL EXAMINE:

1. external genitalia
2. bilaterally, inguinal region
3. bilaterally, femoral triangles
4. perineum

أهمية الحاجات ده أن عيب ماتشوفش فيها أى abnormality
It means you've done proper local examination.

PATIENT IS STANDING DURING EXAMINATION; HE LIES DOWN AT THE END OF THE EXAMINATION FOR:

5. Perineum
6. Reducibility
7. Relation to pubic tubercle
8. Internal ring test

N.B. IN VV, PATIENT STANDS DURING EXAMINATION, HE LIES DOWN FOR:

1. Osteoarthritis
2. Sciatica
3. Trendelenberg
4. Multiple tourniquet test

1- Inspection:**1- Swelling:**

- *Look at the swelling* (to observe **7S**: site, size, shape, surface, skin, special chch & other swellings)
- Ask the patient to cough
- *Then look at the back of the scrotum*
- *Then cover the patient and start talking*
- B By inspection, swelling in the RT inguinoscrotal region, 20*12 cm, oblong in shape, smooth in surface, skin shows no dilated veins, no scars no sinuses. Thrill is present on cough (varicocele always shows thrill) And no impulse on cough. وانا مش تشايف inguinal LNS

ORAL

- **WHY DID YOU EXAMINE FOR INGUINAL LNS?**

As skin of scrotum sends to medial half of transverse limb of inguinal LNS

- **WHERE DOES TESTIS SEND ITS LYMPH DRAINAGE?**

To para-aortic LNS (as testis originated from abdomen, close to aorta from which it takes its blood supply –testicular artery)

2- Scrotum:

Normal comment: 2 full compartments, with median raphe, no dilated veins, no scar no sinuses

e.g Assymetrical compartments

No dilated veins, no scars, no sinuses (no anterior nor posterior sinus)

ORAL**WHY IS EXAMINING COMPARTMENTS IMPORTANT?**

As empty scrotum may be present due to

Undescended testis

Retractile testis

Ectopic testis

Surgical removal

Congenital absence

SINUSES?

As TB causes posterior sinus and syphilis causes anterior sinus

CAN TB CAUSE ANTERIOR SINUS?

Yes, if there is polar inversion of testis (epididymis lies anteriorly)

3- Penis:

Normal comment: No hypospadias, no epispadias, no meatal stenosis, no ulcers

4- Perineum: when patient lies down

2- palpation: 4S TT CE 3S

1. swelling

- Site:

Hold neck scrotum

If swelling is completely above your hand → inguinal

If swelling is completely below your hand → scrotal

If the swelling is in between your hands → inguinocrotal swelling.

- Size
- Shape
- Surface
- Tenderness
- Temperature

- Consistency:

- BIPOLAR FLUCTUATION TEST

To tell if the swelling is lax hydrocele not a tumour.

Thumb and finger → pressing upper pole (observing hand)

So swelling becomes tense

Thumb and fingers of other hand → pressing lower pole of swelling (pressing hand)

Observe if observing fingers are separated.

- Pinching test:

If swelling is too small

Fix testis with one hand

Start as lateral as possible, pinching skin scrotum (over testis)

If another soft tissue layer is felt deep to skin, rolling between pinching fingers, it means there is a small hydrocele

تحس حاجة بين صوابك اللي ماسكة جلد scrotum

- (no edge!)
- Other swellings: inguinal LNS
- Surrounding structures: skin
- Special chch

COMMENT

swelling is not warm, not tender, soft, with thrill on cough. مش حاسس
inguinal LNs, مش حاسس spermatic cord

2. Scrotum:

Testis is 1*2*4 cm, firm in consistency, with preserved testicular sensations تدوس مره واحدة وتسأله حاسس؟

Other testis is atrophic, soft, with preserved testicular sensation.

ORAL | TESTICULAR SENSATION IS LOST IN?
Syphilis, tumour and old hematocele

3. Spermatic cord:

At neck scrotum: thumb anteriorly, one or more fingers posteriorly (both sides)

COMMENT | Thickness is equal to that of little finger, can be flattened (unlike filariasis – matted cord), vas is not beaded (unlike TB), no thrill on cough (unlike varicocele)

4. perineum

when he lies down العيان نام

PERCUSSION

AUSCULTATION

TRANSILLUMINATION:

In the dark

Or by looking through rolled paper

تلف ورقة وتبص من جواها عشان مش حايفع تطفى النور

Red glow = tranlucent

Table DIAGNOSIS AND ITS DEFENSE

Diagnosis:	Defend your diagnosis:
LT 1RY VAGINAL HYDROCELE, NOT COMPLICATED	Swelling: مش متدلع Purely scrotal Cystic translucent Bowing test: لا تذكره إلا لو سئلت عنه While holding varicocele, ask the patient to bow. 1ry varicocele: tension decreases 2ry varicocele: no effect N.B. this patient has history of hematemesis and has HSM لكن ماينفعش تغير حالتك وماينفعش تحطها association الحل: حالتك ايه؟ History of hematemesis

By general examination: liver and spleen enlargement
But the resident/a paper was put to examine scrotum

- N.B.** | **PHIMOSIS:**
Narrowing of opening of prepuce → may cause retention (indication for circumcision)
- PARAPHIMOSIS:**
incomplete circumcision → fibrosis around glans penis (after inflammation of prepuce) → retention

INGUINOSCROTAL PAIN SHEET

Take sheet متدلع & مش متدلع
(أسأل كل حاجة)

Personal history:

Sterility:

أصغر عيل عنده كام سنه؟
طب انت اللي منظم ولا بتحاول ومش عارف؟

Present history:

Pain (as usual)

NERVE INJURIES XIV

ANATOMY OF NERVE DISTRIBUTION IN HAND:

- **3 nerves:** → Median
→ Ulnar
→ Radial

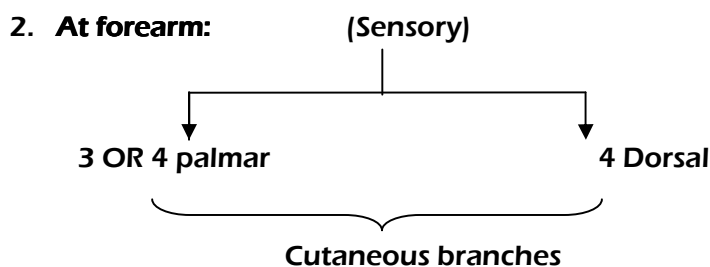
MOTOR

❖ 1ST RADIAL NERVE: SUPPLIES :

1. **At axilla:** Triceps: extension elbow.
2. **In spiral groove of humerus: 3 Ms :**
 - ECRL: ext. wrist with radial deviation.
 - BR: flexion of semi pronated elbow.
 - Supinator: Supination.
3. **At elbow: 2 branches:**
 - Superficial radial (Sensory)
 - Post interosseous (Motor) → to all long extensors "all muscles on extensor surface except the 3 Ms. Supplied at spiral groove" → Extension wrist & fingers.

❖ 2ND ULNAR NERVE: SUPPLIES:

1. **At forearm: (Motor)**
 - Medial ½ of FDP
(Flexion of distal phalanges of medial 1 ½ fingers)
 - FCU: flexion wrist with ulnar deviation



3. **At the hand: 13 or 14 Muscles:**

- 7 or 8 interossei
- 2 med. Lumbricals.
- Adductor pollicis.
- 3 hypothenars: → Abd. Digit minimi
→ Opponens Digit minimi
→ Flexors Digit minimi

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- **The action of 13 or 14 muscles of ulnar nerve in the hand are:**
 - 7 or 8 interossei: Abduction & Adduction of the fingers
 - 2 med. Lumbricals: writing: Flexion MCP

Extension IP  PIP
DIP

Of 2 Med. Fingers

- **Adductor pollicis: Adduct Thumb**
- **3 hypothenars:**
 - ✓ **Abd. Digit minimi: Adduct 5th finger**
 - ✓ **Opponens Digit minimi : Opposition 5th finger → تسبيح**
 - ✓ **Flexors Digit minimi : Flexion 5th nerve**

❖ 3RD MEDIAN NERVE:

Supplies: All muscles of flexor surface of forearm except those supplied by ulnar nerve (FCU & Med. 1/2 FDP)

So, it supplies:

- 1. At the hand:**

- 3 thenars:
 - o **Abd. Pollicis Brevis: Abd. Thumb.**
 - o **Flexor „ „ : Flexion of proximal phalange of thumb**
 - o **Opponens Pollicis: Opposition of thumb with other fingers → تسبيح**
- 2 lateral lubricals: writing:
 - **Flexion MCP**

- **Extension IP**
 - PIP**
 - DIP**
 - Of 2 Middle & Index.**

- ## 2. At Forearm:

- **Pronator teres**→ **Pronation**
- **FDS** → **Flexion of PIP joint of fingers**
- **Lat. 1/2 of FDP**→ **Flexion of Distal phalanges (DIP) joint of Lat. 3 ½ fingers**
- **Flexor Pollicis longus** → **flexion of distal phalanx thumbs**

N.B. Lumbricals are 2 halves { 2 medial (supplied by ulnar)
2 laterals (supplied by median)

As

Due to: they take origin from tendons of FOP which is $\begin{cases} \rightarrow \text{medial } \frac{1}{2} \text{ (By median)} \\ \rightarrow \text{Lateral } \frac{1}{2} \text{ (By ulnar)} \end{cases}$

N.B.2

- ✓ FPL → Flexes distal phalanx thumb
- ✓ FPB → Flexes Proximal phalanx thumb

N.B.3

Most important supinator in body is Biceps → Flexed Elbow يبقى
 But if elbow is extended → Biceps ONLY extends it & not supinates it.
 So, to test supinator action only (Without being assisted by biceps), you should stop biceps from action of supinator & this occurs by extending elbow → abolishes action of Supination by biceps.

Elbow extended لازم تعمل Supination وكوعك مفروود عشان مبيقاش فيه اي دور لل Biceps لأن طالما ال Biceps مركزة في ال flexion وليس ال Supination
 ال

N.B.4

which is stronger Supinator or Pronator?

Answer:

Supinator is stronger than Pronator → لذلك ربط المسمار أسهل عندك من فكاه

Clock wise by Supination → لأن ربط المسمار

Anti-clockwise by Pronation → وفكاه

ولما المسمار يغلس عليك اوي

You flex your elbow to assist your supinator by Supinating action of biceps which was abolished while extending elbow & appeared by flexing it.

N.B.5

Oral question: which is more important?? Median which supplies 5 Muscles or Ulnar which supplies 13 or 14 Muscles in the hand??

Answer: Median which supplies 5 Muscles in the hand as: opposition of the thumb is more important than any other action & it is done by Opponens pollicis which is supplied by median

N.B.6

All thumb muscles supplied by Median except Adductor pollicis which is supplied by ulnar.

SENSORY

- **Ulnar supplies** {
 - Med. 1 ½ fingers — Palmar aspect & Dorsal aspect
 - Med. 1/3 hand — Palmar aspect & Dorsal aspect
- **Median supplies** {
 - Lat 3 ½ fingers — Palmar aspect & Dorsally distal phalanges ONLY
 - Lat. 2/3 hand — Palmar aspect ONLY
- **Radial supplies** {
 - Lat. 3 1/2 → dorsal aspect only & expect distal phalanges
 - Lat.2/3 hand → dorsal aspect ONLY

N.B. Which is more seriously affecting sensory supply Radial or Median??

Answer: Median is more seriously affecting sensory supply of hand as if radial injured, it's area is overlapped by median & ulnar except small wedge at the base of the thumb while if median injured, not compensated by others

2- LOCAL EXAMINATION OF NERVES:

1st Radial nerve:

- 1- Triceps: the pt. extends elbow while he is fully abducting his arms in order to abolish any effect of gravity on elbow joint (Extended by triceps purely)
- 2- BR: the pt flexes elbow while forearm is semi pronated & feel BR (this is to against resistance of doctor's hand)
- 3- Supinator: the pt. supinates the extended elbow (to abolish action of biceps of Supination)
- 4- Long extensors: the pt. asked to extend wrist & fingers.

2nd ulnar nerve: 5 Muscles

- 1- FCU: pt. flexes wrist with ulnar deviation against resistance & feel muscle & tendon at wrist.
- 2- Med ½ FDP: pt. flexes distal phalanges of ring & little while holding (fixing – supporting) middle phalanx
- 3- Abd. D.M: Abduct little finger
- 4- Adductor pollicis: Froment's test →
 Pt. grasps paper like this where 2 hands are beside each other. Thumbs are anterior to paper & rest of fingers posterior to paper & you try to withdraw it.
 Flexion of distal phalanges هيعوضها بشوية Add. Pollicis لو ال بايطة،
 5- Interossei: Card test →
 Pt. holds card between 2 fingers & you try to withdraw it.
 Flexion لو بايطة بحركة I.O. ولكن ايدته تكون مريحة على الترييزة عشان لا يعوض ال

3rd Median nerve: 6 Muscles

- 1- P.T: while pt. hands are fist like (Flexion) (Boxing hand). He pronates it & you feel the muscle
- 2- FPL: fix the proximal phalanx of thumb & ask pt. to flex the terminal phalanx.
- 3- FDP (Lat.1/2): Fix the middle phalanx of index & middle fingers & pt. flexes the distal phalanx.
- 4- FDS: ask the pt. to flex the middle finger proximal interphalangeal joint while rests of fingers are hyper-extended by the doctor's hand. (Discussed later after end of median)
- 5- Opponens pollicis: تسبيح
- 6- Abd. Pollicis Brevis: pt. abducts thumb to touch (pen for example) above palm of his hands, while his hand is resting on the table.

N.B.
Discussion
about FDS
action:

- 1st tendons of FDP are matted ملزقة together by lumbricals which take origin from FDP tendons.

- If you hyper-extend all fingers joint (MCP, PIP & DIP), this will fix the FDP within its sheath & its action will be abolished → so, try to flex terminal phalanges of middle or ring (by FDP), you will not be able.

And the reason is that: Hyperextension of tendons of FDP which are already connected & matted (By lumbricals) to each other. This hyperextension eliminates action of FDP (So, you are not able to flex terminal phalanx of middle & ring).

BUT, this test will not be valid to index & little due to varieties in people who have Flexor indicis & Flexor digiti minimi. So, apply this test to Middle & ring ONLY.

But what is the real application of this test?

-If you hyper extend your fingers at all its joints (MCP, DIP & DIP) you can eliminate action of FDP. So → you can test FDS (which acts on PIP) alone & without assistance of FDP (eliminated) .

so, while you hyperextend his fingers ask him to flex the (PIP) of middle or ring.

***This is pure test for FDS alone.**

TYPES OF PARALYSIS OF DIFFERENT NERVES & SENSORY EFFECTS.

1- Radial nerve:

I deformity

A - injury of Radical n itself at spiral groove.

No extensions of elbow & wrist & fingers Finger drop
Wrist drop

B- injury of post.interosserous of all extensors except

Those supplied at axilla & spinal groove

No extensors of fingers but preserved ECRL which is supplied at groove

Finger drop with no wrist, elbow drop

So, ECRL preserved with preserved extension wrist with radial deviation

C – injury at axilla

As as spiral groove : wrist drop & fingers drop
But add paralysis of triceps
+ elbow drop

II Muscles wasting

A-at spiral groove: back of forearm
B-At axilla : back of forearm
& back of arm

III Trophic changes & sensory loss

On dorsum of 1st web as rest if area supplied by it is compensated (overlapped) by Median & ulnar except this triangle

2- Ulnar nerve

I deformity

A-At wrist : partial claw hand

As paralysed muscles are

*lumbricals: which extend PIP & DIP of ring & little → so there is flexion of PIP & DIP ring & little.

↓ lumbricals: which flex MCP of ring & little → so there is extension of MCP ring & little

B- at elbow: ulnar paradox

As wrist : paralysed lumbricals but added also paralysis of Medial ½ of FDP → no flexion of DIP & PIP joints of ring & little

So the partial claw hand becomes less apparent (as flexion of DIP & PIP [which was caused by lumbricals paralysis] became neutralized by paralysis of flexors of DIP & PIP (ie FDP))

(يعني لما علينا بال

Injury

لفوق خفت شوية ال

Deformity)

Said A.H. & hence named paradox

عكس المتوقع

II muscle wasting

A- At wrist : Flat hypothenars & wasted interossei (especially 1st)

B- At elbow flat hypothenars & wasted interossei

+ كمان

wasted Med.border of forearm

III trophic changes & sensory lossAs Medial 1/3 of hand & Medial 1 ½ fingers both dorsum & palmar aspects**3-median nerve****I-Deformity**Median = Monkey
Radial = Wrist**a- At wrist:** Ape hand

All muscles of thumb paralyzed except adductor pollicis (Supplied by ulnar). So, thumb adducted

Plus: wasting of the thenars

Plus: partial claw hand at middle & index (as ulnar description)

N.B:

اللى واخذ عينيك هو Ape hand مش (thumb) partial claw hand (middle & index)

b- At elbow: Benediction attitude

As ape hand

But plus:

- Paralysis of lat. 1/2 FDP → (which flexes distal phalanx of index) → extended
- Paralysis of FDS → (which flexes proximal phalanx of index) → extended
- Paralysis of lumbrical (2 lat.) → (Which flexes MCP joint of index) → extended

→ It means all flexors of index are paralyzed. So, it is extended while other fingers are taking attitude of serial flexion

NB1:- This doesn't affect middle as there is variability & overlap of lumbrical moving it assisted between ulnar & median

NB2:- other fingers are in serial flexion as this is the normal tone of the body

(أنا وأنت ماثنين فى العادى بالطريقة ديه مفيش حد بيبقي شادد أيديه وفاردها)

Said A.H.

اسمه هو اللى واخذ عينيك فلا يسمى ape hand
 رغم أنه فيه Ape hand
 لأن اللى واخذ عينيك هو extended index

Its name is:

- **pointed pointing finger**
 (Pointed due to wasting of muscles & atrophy of pulp)
 (رفيع في نهايته tapering)
- **Pistol hand** زي المسدس
- **Benediction attitude** الواعظ يوزع البركة على الحضور أستغفر الله

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-Oschner clasping test

أهو الراجل ده عمل **test** مسخرة جاب الناس وقال لهم أنا اخترعت **test** لتشخيص هذا التشوه----جاب راجل طبيعي وقال له أعمل كده فعمل كده (مسك أيديه الأثنين ببعض) فمحصلش حاجة وجاب راجل عنده شلل في **median** وقاله أعمل كده فعمل كده وطلع صباعه ال **index** لفوق

II- Muscles wasting

a- at wrist: flat thenar

b-at elbow: flat thenar + wasted muscles of front of forearm

III-atrophic changes

Tapering fingers

Notes upon paralysis & its tests

NB 1: Froment's test:

- Done to test ulnar nerve: Adductor pollicis

So, if ulnar nerve injured → adductor pollicis not works

When you withdraw a card from his hands, he tries to compensate adduction (which is lost) by flexion (which is preserved) due to intact flexor pollicis longus & Brevis that are supplied by median

- If also median is paralyzed, pt. can't compensate even by flexion (can't catch paper at all)

NB 2:

لو حالة **Cut wrist** ← العضلات اللي هتعمل Examination هي:

- Ulnar & median muscles in hand &
- FDS & FDP (لاحسن تكون ال Tendons اتعورت)

لو حالة خبطة **elbow** ← العضلات اللي هتعمل Examination هي :

- All muscles except triceps which supplied at Axilla

Oral Important Notes بعنف

1. Differences among Bone (Joint) injury, Nerve injury & Tendon injury:

1) Joint injury:

- No passive movement (هتكسره)
- No sensory loss

2) Tendon injury:

- Passive movement (ممكن تفرده)
- No sensory loss

3) Nerve injury:

- Passive movement
 - Sensory loss
- الوحيد } Sensory lost Motor

2. How to differentiate between Ulnar, Radial & Median Nerves by thumb examination??

- Radial → Extension
- Ulnar → Adduction
- Median → Opposition

3. Movements of Thumb?? سؤال شفوي مهم: اعملى حركات ال Thumb

- Adduction & Abduction
- Flexion & Extension
- Opposition & Circumference

4. D.D of claw hands??

- Ulnar nerve injury → partial claw
- Ulnar & Median nerves injuries/ klumpke's paralysis / lower brachial nerve injury → Complete claw
- Post-burn contracted scar
- Dupytern's contracture (partial claw)
- Volkmann's ischemic contracture (Complete claw)
- Neglected suppurative Teno synovitis
- Polio, syringomyelia & advanced A.R

N.B: klumpke's paralysis: (C8 & T1) affection: (Type of Brachial plexus paralysis) → Affects small muscles of hand (Lumbricals)

N.B: Dupytern's contracture:

- Thickening & contracture in palmar fascia in alcoholics & diabetics with unknown etiology
- ttt: Early physiotherapy & if failed → Surgical excision.

5. Claw hand:

- Is the reverse of writing position which is done by lumbricals يخليك تمسك الريشة

العكس Claw hand

HISTORY

1) **PERSONAL H\O: AS USUAL**

2) **COMPLAINT: LOSS OF SOME MOVEMENTS & LOSS OF SENSATION IN SOME AREAS OF (E.G RT HAND)**

ولا تذكر كام صباع لأن عمر العيان ما هاي عرفها

3) **PRESENT H\O:**

a) swelling

b) pain

c) disturbance of function

- general: x مافيش
- local: - VAN → vein injury : edema
→ Artery injury : ischemia
- Bone: joint or bone injury
- Local manifestations: → deformity
→ wasting
→ paralysis
→ trophic changes

زي c/o

d) trauma: cause & ttt : → site
→ time

e) investigations & ttt :

4) **PAST & FAMILY H/O: AS USUAL**

GENERAL EXAM

Don't forget L.L sural nerve graft

LOCAL EXAM

<u>Inspection</u>	<u>Palpation</u>
1-Etiology → scar → swelling	1-Etiology → swelling
2-results → wasting → deformity → trophic	2-Results → muscles nerve عرض → sensation والمس وقل له حاسس ولا لأ
3-Vein → distal edema Artery → manifestations of ischemia Bone → حرك المفصل	3-Vein Artery → pulse Bone → حرك المفصل

PRESENT H/O

The condition started y ago by trauma referred to Agoza hospital sutured & plaster applied ... he noticed wasting & lost sensations then physiotherapy performed , EMG was done .. Then he was submitted to repair & post operative P.T. done..

Swelling appeared after accident removed in operation of repair then recurred.

NO H/O of pain

NO H/O suggestive of limb Edema

NO H/O of fracture or joint injury

NO H/O of trophic changes

Electric Trauma is the cause

EMG done & repair operation was done

بدأت من متى ؟ بسبب إيه ؟
رحت المستشفى ؟ صلح العصب ولا قفل
على طول ؟ عملت علاج طبيعي ورسم
عضلات ؟
بعد كدة عملت تصليح ؟
عملت علاج طبيعي بعدها ؟

عندك كلكوعة ؟ من متى ؟
وأخبارها إيه بعد التصليح ؟

فيه وجع ؟

يدك ورمت ؟

حركة المفصل سليمة ؟

قرح أو شعر يدك وقع ؟

اتخبطت فيها

أشعات تحاليل محاليل
عمليات

INSPECTION

There is a

1. deformity of (Rt) hand in form of extended MCP & flexed PIP & DIP of ring & little
2. Wasting of hypothenars & Interossei especially the 1st
3. NO Trophic
4. 2 scars one is transverse of trauma & other Longitudinal of repair (2ry intention)
5. There is swelling very tender
6. NO Edema
7. NO Loss of pulse
8. Joints with preserved passive movement

1-RESULTS

Deformity اوصفها

Wasting
Trophic

2-ETIOLOGY

Scars
Swelling

3-ASSOCIATION

vein
artery
bone حرك المفصل بيدك

PAST & FAMILY H/O

NO H/O of chronic medical illness
NO H/O of previous operations
NO H/O of DM or HTN

NO family H/O of similar conditions
NO family H/O of DM or HTN

مرض باطنة مزمن
عمليات
سكر ضغط
حد في عيلتك
سكر ضغط

GENERAL EXAM

The pt. is lying comfortably in bed , of average body built , average mentality & cooperative
B.P. : pulse : temp. : R.R. :
On examining of H&N NO jaundice , pallor or cyanosis
On examining UL NO signs as tenderness suggesting metastasis
On examining chest NO metastasis or TB
On examining abd. NO hepatomegaly suggesting metastasis
On examining UL NO signs as tenderness suggesting metastasis

PALPATION

Sensations lost on
(palmer aspect of medial 1/3 hand & medial 1 1/2 fingers & also lost on (dorsal aspect of medial 1/3 hand & medial 1 1/2 fingers Due to repair using dorsal cutaneous branch)

ACTIVE movement

lost but preserved passive movement

Swelling (not) felt

NO Edema

Pulse felt

Joints with preserved passive movement

1-RESULTS

لأس : حاسس هنا وهنا
عرض الـ NERVE

لاحظنا إن شاء الرحمن في إضافات الصور

2-ETIOLOGY

Swelling

3-ASSOCIATION

vein
artery
bone حرك المفصل بيدك

DIAGNOSIS

Table DIAGNOSIS AND ITS DEFENSE

Diagnosis:	Defend your diagnosis:
A case of Rt complete traumatic ulnar nerve injury at wrist with neurotmesis Complicated by neuroma formation And may be associated with Rt ulnar A. injury	1-N. injury→ Due to sensory & motor loss 2-Ulnar→ as distribution of sensory & motor loss is of ulnar 3-Neurotmesis????→ as –open injury مارجعش- -repair is not done with neuroparexia 4-Complete→ as distal to injury all functions lost (even digiti-minimi) [loss of all functions; motor & sensory distal to site of injury]

DISCUSSION ABOUT CAUSALGIA:

هي غير مفهومه الى الآن، فيه N.N sensory, sympathetic
 فلما يتقطع شوية (symp. Fibers) ويحصل repair يلحموا يدخلوا مع شوية sensory ويلحموا فيهم فمع كل sympathetic
 stimulation ال fibers اللي رايحه الى الجلد تحس stimulation
 ب sever pain at distribution of this nerve وطبعا الحل مش انك تقطع العصب تاني وتلحم كل نوع من fibers مع اللي قصاده لا
 احنا مصدقنا انه لحم اصلا ولكن الخل انك تعمل لذا العيان sympathectomy

- * Cause of causalgia is cross regeneration between sensory & sympathetic fibers
- * C/P severe pain along distribution of nerve
- * ttt Sympathectomy
- * occurs in NN which contain both sensory & sympathetic fibers eg: sciatic , medial , popliteal in L.L. & median , ulnar in u.l.

TINEL TEST

- * after repair → fibers grow about 1-3 mm/day = 6cm/month in order to reach distal & supply its original distribution area
- * How to know that axons grew & reached a certain point distal to repair?
 → Percuss on a point distal to repair wound site impulse moves to brain which immediately feels
] this proven that site of percussion stimulated pain at sensory area of distribution of nerve [nerve fibers (which succeeded to grow to reach at this point)
 يعني باختصار يتعمل الاختبار في واحد عامل repair عشان follow regeneration

Top nerve distal to repair (lesion) → tingling sensation distally= growing nerve fibers

